

**Cardio Trainer
Owner's Manual**



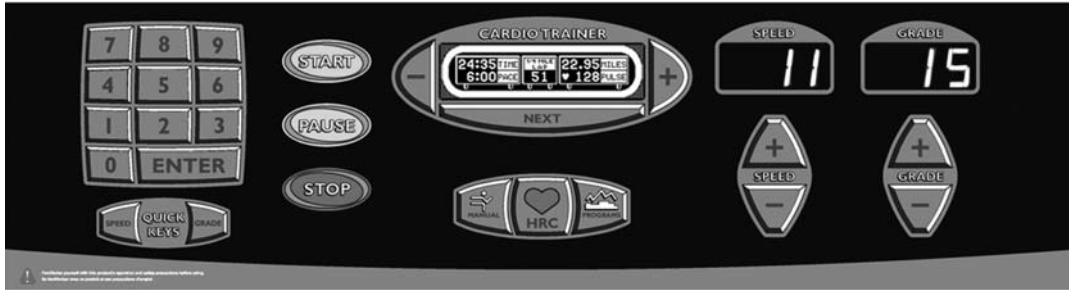
Worldwide excellence for over 40 years

PART NUMBER 72069 • REVISION 1.0

CARDIO TRAINER

LANDICE

Quick User's Guide



Before you start the treadmill:

The red **Safety Key** must be magnetically connected to the front of the display panel. During operation, removing the **Safety Key** will cause the treadmill to stop until it's replaced.



To start the treadmill:

Pressing **START** powers up the treadmill and all displays will light. The treadmill will begin moving at 0.5 mph (0.8 km/h).



To pause the treadmill:

Pressing **PAUSE** will cause the treadmill to stop, but all statistical information will be preserved. Press either **START** to resume or **QUICK SPEED** to a desired speed (see using the **QUICK KEYS**).



To turn off the treadmill:

Pressing **STOP** stops the treadmill. The treadmill will shut off and all current statistical information will be cleared.



To change speed:

Hold speed "+" key down to increase speed. Holding speed "+" key depressed for longer than 2 seconds causes the speed to increase at a faster rate.

Hold speed "-" key down to decrease speed. Holding speed "-" key depressed for longer than 2 seconds causes the speed to decrease at a faster rate.



To change grade:

Hold grade "+" key down to increase elevation. Release the button when the display indicates the desired elevation setting.

Hold grade "-" key down to decrease elevation. Release the button when the display indicates the desired elevation setting.



To view different display screens during your workout:

Press **NEXT** at any time to choose the display screen that best suits your workout.

WARNING: Failure to observe the following operating instructions can result in serious injury!

- [1] If you are suffering from any illness, condition, or disability which affects your ability to run, walk or exercise, do not use this product without consulting your doctor first.
- [2] If you are suffering from any illness, condition, or disability which affects your ability to run, walk or exercise, do not use this product without supervision present. Failure to do so can result in serious injury should you fall while the treadmill is moving.
- [3] Failure to leave ample clearance around the treadmill could result in the user becoming trapped between the treadmill and a wall, resulting in burns or other serious injury from the moving treadmill.

*Allow a minimum clearance of **18 inches on each side** of the treadmill.*

*Allow a minimum clearance of **4 feet at the rear** of the treadmill.*

- [4] Never stand on the treadmill when starting the treadmill. A sudden start could cause you to lose your balance. Always stand with one foot on each side rail until the belt starts moving.
- [5] Always wear the emergency stop safety strap securely around your wrist while exercising. Failure to do so can result in severe injuries should you accidentally fall while exercising.
- [6] Test the emergency stop safety key on a regular basis by pulling on the cord and ensuring that the treadmill comes to a complete stop.
- [7] Always remove the safety key from the treadmill when you are through exercising, especially if children are present. This will prevent them from accidentally starting the treadmill.
- [8] Be sure to familiarize yourself with this manual. Look it over carefully. Be sure you understand the control panel operation before using the treadmill.

When using an electrical appliance, basic precautions should always be followed.

Read all instructions before using.

DANGER: Always unplug the treadmill before cleaning or removing the motor cover. To reduce the risk of electric shock in the event of an electrical storm, always unplug the treadmill from the electrical outlet immediately after using.

SAVE THESE INSTRUCTIONS

WARNING: To reduce the risk of electric shock or injury to persons:

- [1] An appliance should never be left unattended when plugged in. Unplug from outlet when not in use.
- [2] Close supervision is necessary when this unit is used by or near children or disabled persons.
- [3] Use this treadmill only for its intended use as described in this manual.
- [4] Never operate this treadmill if it has a damaged cord or plug, if it is not working properly, or if it has been damaged. Call your selling dealer immediately for examination and repair.
- [5] Keep the power cord away from heated surfaces. Be sure the line cord has plenty of slack and does not get pinched underneath the treadmill when it elevates and de-elevates.
- [6] Never operate the treadmill with the motor cover air openings blocked. Keep the air openings free of lint, hair, and dust.
- [7] Never drop or insert any object into any opening. Be sure no objects are near or underneath the moving treadbelt when you are using the treadmill.
- [8] Do not use outdoors.
- [9] Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- [10] Connect this appliance to a properly grounded dedicated outlet only.
- [11] To disconnect, press the STOP button, remove the Safety Key, and unplug the unit from the wall outlet.

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce risk of electric shock. This product is equipped with a cord that has an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

120 VOLT TREADMILLS

Treadmills marked 120 VAC are intended for use in a nominal 120-volt circuit with a grounding plug. Make sure the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product.

200 - 250 VOLT TREADMILLS

Treadmills marked 200-250 VAC are intended for use on a circuit having a nominal rating more than 120V and are factory-equipped with a specific cord and plug to permit connection to a proper electric circuit. Make sure the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product. If the product must be reconnected for use on a different type of electric circuit, qualified service personnel should make the reconnection.

DANGER: Improper connection of the equipment-grounding connector can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product. If it will not fit in the outlet, have a proper outlet installed by a qualified electrician.

Basics

Introduction.....	1
Assembly Instructions.....	2
Basic Control Panel Operations.....	4
Features.....	5
Getting Started.....	7

Control Functions

Manual Mode.....	8
Using the Numeric Keypad.....	9
Built-In Programs.....	10
Using the Built-In Programs.....	11
User Program Edit Mode.....	12
User Program Learn Mode.....	13
Specific Goal Programs.....	14
Heart Rate Control Programs.....	15
Running a Heart Rate Control Program.....	16
User Heart Rate Control Programs.....	17
Fitness Tests Overview.....	18
Taking the Army 2 Mile Fitness Test.....	19
Taking the Balke Fitness Test.....	20
Taking the Firefighter Fitness Test.....	21
Self-Diagnostics.....	22

Heart Rate Monitoring

Overview.....	23
My Target Heart Rate Zone.....	24
Heart Monitors (Wireless and AccuTrack).....	25

Getting The Most Out of Your Workouts

Should You Walk or Run?.....	27
Optimizing Your Workouts.....	28

Maintenance

Maintenance.....	29
------------------	----

Appendices

Appendix A: Medrail Installation.....	30
---------------------------------------	----

Congratulations! You've made a very smart investment! Your Cardio Trainer treadmill is a high-quality fitness tool that will give you years and years of fitness benefits.

One of the great things about the Cardio Trainer is its diversity of applications. It's terrific for just starting out on a walking program or easy jog. In the case of a veteran runner, it's the exact prescription needed for precision interval training to lower your 10K time.

Regardless of the application, unpleasant weather is not an obstacle. Cold, windy, wet days will never discourage you again, nor will the heat and humidity of the summer months. If you're the type of person that likes to do two things at once, now you can watch your favorite program on TV or keep an eye on your kids and take care of your health at the same time.

Your treadmill was a smart purchase, but you already knew that, so let's move on and get started.

BEFORE YOU BEGIN

These are some things you should do before you start to exercise on your treadmill:

INSTRUCTION MANUAL

Be sure to familiarize yourself with this manual. Look it over carefully. Be sure you understand the control panel operation before using the treadmill.

WARRANTY INFORMATION

Fill out your warranty registration card and mail it in today. Landice backs your treadmill with a strong warranty. For the factory to respond to any problems you may have, we need your warranty information on file. Do it today.

Landice will send you a complimentary Landice T-shirt upon receipt of your warranty registration card.

SELECTING A LOCATION

Install your treadmill in a climate controlled room.

*Allow a minimum clearance of **18 inches on each side** of the treadmill.*

*Allow a minimum clearance of **4 feet at the rear** of the treadmill.*

Failure to leave ample clearance at the rear of the treadmill could result in the user becoming trapped between the treadmill and the wall should the user accidentally trip and fall while exercising.

Be sure the line cord has plenty of slack and does not get pinched underneath the treadmill when the treadmill elevates up and down. Make sure the treadmill is plugged into a dedicated line.

STEP 1: Unbolt treadmill from pallet



- On L7 treadmills it is necessary to remove the bolts which hold the treadmill to the pallet.
- Start by removing the top bolts.
- Lay the treadmill on the ground, and then remove the bottom bolts by placing the treadmill on your toolbox.
- With the bolts removed, the treadmill will be free to move around in the box.

STEP 2: Cut the box off the pallet



- Remove the metal strapping around the box.
- Using a razor blade knife, cut the box just above the bottom row of brass staples along all sides of the box.
- **DO NOT cut through the center of the box, as you could damage the treadmill.**
- Remove the box and discard.

STEP 3: Unstrap the treadmill



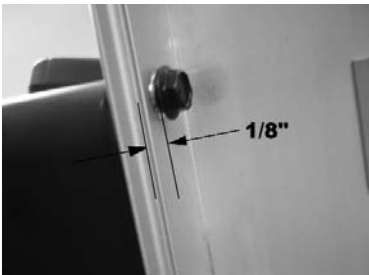
- The treadmill components are held together with plastic strapping.
- Carefully cut and remove the strapping. Remove the treadmill upright and accessory boxes from the treadmill. Lift the treadmill off the pallet.
- Carefully remove the upright side cover from the upright assembly.

STEP 4: Secure upright to frame



- Slide the upright down onto the 8-side frame bolts.
- Tighten bolts with a 7/16" extended socket.

STEP 5: Prepare to install hand rails (For Med Rail Installation: In steps 5-8, handrails simply refer to the 4" black clamps)



- The handrail mounting bolts have been threaded into the rails for shipping. Remove them.
- Attach both handrails by first hand-starting the bolts through the upright and then using a 1/2" socket. Leave about 1/8" of slack.

(DO NOT TIGHTEN FLUSH TO SURFACE).

STEP 6: Place crossbar



- After mounting both handrails, gently lower the curved crossbar into position between them.
- Each end of the crossbar should cover the two smaller access holes that are cut into the handrails.
- Leave contact heart rate connection harness hanging for now.

STEP 7: Secure crossbar



- Using an extended 1/2" socket, carefully guide the 2 inch bolt with lock washer into the big access hole in the side of the handrail.
- Once the bolt reaches the crossbar, tighten it.
- Repeat this step with the other handrail.

STEP 8: Secure hand rail



- Press the dome plugs into the large access holes on the side of the handrails.
- Finish tightening the handrail bolts from STEP 5.
- **Note: Med Rails go to Appendix A on page 30.**

STEP 9: Connect contact bar



- Feed the contact heart rate harness through the access hole in the inside of the left upright (insert strain relief provided). Feed harness up into the control panel.
- Pull back the membrane and connect harness to white 3-pin connector on side of display board.

STEP 10: Ground contact bar



- Remove the nut from the screw at the end of the green ground wire.
- Attach the green ground wire to an available hole on side of the control panel and secure it with the nut.
- Put the membrane back into place.

STEP 11: Snap upright cover



- Carefully align the upright cover to upright. Working from top to bottom, snap the upright cover into place.

STEP 12: Install upright end cap



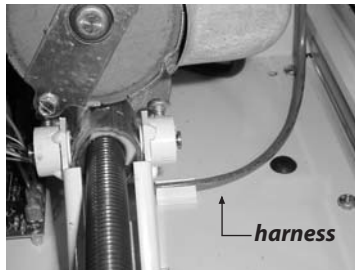
- Press the plastic end cap into the upright carefully fitting the plastic pins into the small bosses in the aluminum.
- Align the upright cover beneath the end cap and install the Phillips head screw.
- Tighten the Phillips head screw until side cover aligns with endcap (*Do not over-tighten*).

STEP 13: Check drive belt tension



- Check the tension on the drive belt by placing the drive belt between your thumb and forefinger and twisting.
- The proper twist is 45°. If the belt needs to be adjusted use a 7/16" socket and turn the bolt underneath the motor pan attached to the motor's hook screw.

STEP 14: Route the wire harness



- HOME TREADMILL:**
- Route the wire harness underneath the elevation motor and secure with harness restraint clip provided. Plug connector into circuit board until it snaps into place.

- COMMERCIAL TREADMILL:**
- Route the wire harness behind the elevation motor and secure with harness restraint clip provided. Plug connector into circuit board until it snaps into place.

STEP 15 Adjust the treadbelt



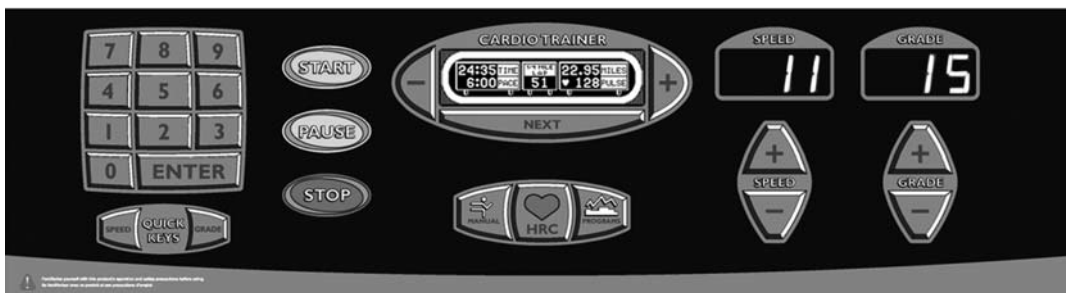
- The treadbelt is tracked and tensioned via the take-up screws located at the back of the treadmill.
- Check the tension of the treadbelt. At proper tension you should be able to place your hand between the belt and deck and reach the center of the treadmill. If you cannot reach the center, the belt is too tight and must be loosened. If your hand reaches past the center the belt is too loose and must be tightened.

STEP 16: Install motor cover



- Remove the black motor cover screws in the side of the frame. Place motor cover onto treadmill.
- Attach motor cover with Phillips head screws provided. Place rubber spacer between cover and frame.
- Plug treadmill into a dedicated 15A outlet. Walk on treadmill at approximately 2.5 mph for 20 to 45 minutes to properly walk in lubricant.

Basic Control Panel Operations



Press **START** to power up treadmill. All the displays will light and the treadmill will begin moving at 0.5 mph (0.8 km/hr in metric mode).



Press **PAUSE** to place the treadmill in pause mode. The treadmill will stop, but all statistical information will be preserved. Press either **START** to resume at 0.5 mph or **QUICK SPEED** to a desired speed. When in programs, resuming from the pause mode will return the treadmill to the last actual speed and position in the program.



Press **STOP** to stop the treadmill from moving. The displays will shut off the treadmill and all current statistical information will be cleared.



Press **QUICK SPEED** or **QUICK GRADE** to achieve instant speed or grade change. Enter the desired value using the numeric keypad or the center “+/-” keys. Example: for 5.0 mph, press **QUICK SPEED**, “5”, “0”, **ENTER**.



Press **NEXT** to rotate through the selectable display screens or enter any data.



To use the built-in workout programs:
Press **PROGRAMS** at any time to display the programs selection screen. Scroll through built-in and user-defined program previews with center “+/-” keys and select the program that best suits your desired workout by pressing **NEXT**. You will now be asked to enter the program’s specific parameters (Maximum Speed, Maximum Grade, Time, etc...). Use the numeric keypad and the center “+/-” keys to select the desired values and press **START** to begin the program.



To use the heart rate controlled programs:
Press **HRC** at any time and choose either a built-in or user-defined cardio program. The heart rate control programs automatically adjust speed and elevation in order to maintain a constant heart rate.



To return to manually controlling the treadmill at any time:
Press the **MANUAL** button at any time and the treadmill is at your command to adjust the speed and elevation.

The Cardio Trainer treadmill combines a versatile liquid crystal display (LCD) with a variety of program options including multiple heart rate control programs. These features and options combine to offer an exciting and fun workout so you can reach your fitness goals.

It's about options:



MANUAL CONTROL

The Cardio Trainer begins a user-defined workout via the Manual mode. While in the Manual mode the treadmill is at your command. There are no time limits and no program parameters to enter. Changes in speed or elevation will only happen when you make them by pressing one of the buttons. You can get back to the Manual mode at any time by simply pressing the **MANUAL** button.



NUMERIC KEYPAD

The numeric keypad feature allows you to go directly to your desired speed or elevation with the use of the Quick Keys. It is also used to enter user information and set up programs. The keypad is an excellent feature that allows you to spend less time pressing buttons and more time enjoying your workout!



5 BUILT-IN PROGRAMS

The Cardio Trainer offers five built-in programs to help you attain your fitness goals. These programs take you through a predetermined twenty-segment speed and elevation profile but at the same time allow you to override each segment to tailor the program to your specific needs.



5 USER-DEFINED PROGRAMS

The Cardio Trainer allows you to create your own custom programs as you go. Any manual changes (speed or elevation) you make during your user-program will be saved and stored. You can also create and modify the user-program using the treadmill's Edit Mode. In the Edit Mode the treadbelt will stop to allow you to modify the program profiles.



3 SPECIFIC GOAL PROGRAMS

The Specific Goal Programs are designed to motivate your fitness goals in a variety of different ways. Before your workout, select a Time, Distance, or Calorie goal. During your workout you will be updated with real-time statistics reflecting your progress toward your specific goal.

HEART RATE CONTROL



The Cardio Trainer comes standard with a contact heart rate crossbar and transmitter strap, which is used in conjunction with any of the 4 Heart Rate Control (HRC) programs provided. The first two standard heart rate control programs maximize workout time by directing the treadmill to automatically change speed and elevation in order to maintain the targeted heart rate(s) for the duration of the program. Furthermore, the two User HRC programs allow you to create separate custom HRC programs. Each HRC program is broken down into 20 programmable segments for more variety in your heart rate controlled workouts.

3 FITNESS TESTS



The Cardio trainer also includes three different programs that accurately measure your fitness level. The Balke and Fire Fighter Fitness Tests use HRC to monitor your heart and how it reacts to speed and elevation changes through a specific protocol. Based on your age, gender, and cardiovascular performance, you will receive a fitness rating upon completion. The Army 2 Mile Fitness Test is a manually controlled 2 Mile test. Based on your age, gender, and completion time, you will receive a fitness score upon completion.

SELF-DIAGNOSTICS



If the Cardio Trainer ever malfunctions, it has the ability to seek out and self diagnose the problem, clearly displaying it in detail in the center LCD. This feature aims at minimizing treadmill down time, helping you maintain your fitness goals.

You will be prompted with self-diagnostics as soon as the treadmill detects any errors. However, you can also manually launch self-diagnostics by pressing the center "+", "-", and Start button at the same time while the treadmill is off.

ENGLISH/METRIC MODE



The Cardio Trainer display comes standard in English units and can be changed to display metric units by pressing the **MANUAL**, **PROGRAMS**, and **START** buttons simultaneously while the treadmill is off. Then press **STOP**. Repeat the same steps to return back to English units.

Make sure you have read and understood this owner's manual. Now you are ready to begin.

Start by straddling the treadbelt with one foot on each traction strip. Once the treadbelt begins moving you can start walking on the treadbelt.

Press the  button, and the power-up screen will appear:



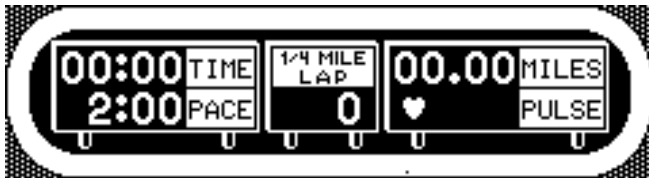
CARDIO TRAINER

After three seconds the treadmill belt will start moving at 0.5 mph. The treadmill will ask you to enter your weight using the numeric keypad or the center “+/-” keys.



Note: Entering your weight helps to accurately calculate calories burned during workout.

Once you have entered your weight, press , , or simply wait three seconds to default into the opening screen (Track Screen).



You will now be in the Manual mode, where you control the speed and elevation at your discretion.

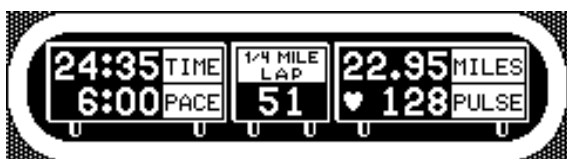
Upon exiting the weight input screen the treadmill enters the Manual mode. In this mode you control all treadmill functions. Any changes in speed or elevation will be a direct result of your touching the control panel.

In the Manual mode you can change the speed and elevation at any time as well as select from one of the three multifunction display screens.

Selectable display



allows you to choose the screen that best suits your workout.



TRACK SCREEN



STAT SCREEN



HEART RATE STATUS SCREEN

Display features

FEATURE	Description
TIME	Time logged on treadmill displayed as “Minutes: Seconds”
DISTANCE	Miles logged on treadmill (kilometers when in metric)
PACE	Time to complete 1 mile (1 kilometer when in metric)
CALORIES	Total calories burned, which is based on user’s weight
CALS/HR	Rate in calories/hour, which is based on user’s weight
LAP (PROGRESS)	1/4-mile (400 meter in metric) track in manual mode
LAP (COUNTER)	Number of laps completed
PULSE	Current heart rate
TIME IN ZONE	Time spent in target zone (zone is 16 beats wide)
“IN ZONE”	User is in the target zone (within 8 beats of the target pulse)
“OUT OF ZONE”	User is outside the target zone (greater than 8 beats from target pulse)
“ABOVE MAX”	User is above the Maximum allowable heart rate in zone
MAX	Maximum allowable heart rate to remain in zone
TARGET PULSE	The target pulse (user defined in Zone Screen)
MIN	Minimum allowable heart rate to remain in zone
“BELOW MIN”	User is below the Minimum allowable heart rate in zone
TOTAL TIME	The total time of the user’s workout
METS*	Current MET level, based on user weight / grade / speed

*One MET is defined as the energy consumed at rest by the average adult.

You can return to the Manual mode at any time by pressing the



button.

The Cardio Trainer is equipped with a numeric keypad, which serves multiple functions to make the treadmill easier to control. It can be used to change speed and elevation, enter user settings, and configure programs.



ENTERING USER WEIGHT

When the treadmill is first started, you are asked for your weight in pounds (kilograms in metric). When prompted by the display, simply enter the desired value using the keypad. Upon entry completion, you can press either **ENTER**, **NEXT**, or wait 3 seconds to advance to the opening screen (Track Screen).

QUICK SPEED / QUICK GRADE

The **QUICK SPEED** and **QUICK GRADE** buttons below the keypad allow you to go directly to a target speed or elevation without having to hold down the Speed/Grade “+/-” keys. Simply press **QUICK SPEED** or **QUICK GRADE**, then enter the desired value using the keypad. Upon entry completion, press either **ENTER**, **NEXT**, or wait three seconds to allow the treadmill to adjust to the new settings.

PROGRAM CONFIGURATION

In program setups you will be asked different information based on that particular program’s parameters. After you enter each value using the keypad, press **ENTER**, **NEXT**, or wait three seconds to advance to the next screen.

- 5 Built-in programs: the keypad is used to enter the program’s maximum time, speed, and elevation.
- Specific Goal Programs: the keypad is used to enter a variety of different information. (Time Goal: Time, Distance Goal: Distance, Calorie Goal: Calorie).
- 5 User Programs: It can be used to set the speed, elevation and time for each individual segment. This will be explained in more detail under the **USER PROGRAM** section of this manual.
- Heart Rate Control (HRC) programs: the keypad is used to enter the program’s maximum speed, target heart rate, and program time.
- User Heart Rate Control programs: the keypad is used to enter the program’s maximum speed, program time, and the target heart rate for each individual segment. This will be explained in more detail under the **HEART RATE** sections of this manual.
- 3 Fitness Tests: the keypad is used to enter your age and gender.

Programs have been added to the Cardio Trainer so you can add some variety to your workouts. You can choose from one of 5 Built-in programs, which will run you through a pre-selected speed and elevation curve. When choosing a program you select a maximum speed, maximum elevation and a time from 10 to 99 minutes (Intervals Program also requires a minimum speed). Once set, the treadmill will not go above the maximum number unless you manually override it. Each program is divided into 20 segments of equal time, beginning with 3 warm-up segments and ending with 2 cool-down segments. For example, a 40-minute program will contain 20 two-minute segments.

The following figures represent the 5 Built-in programs in the Cardio Trainer.

Built-in programs graphics display



FAT BURN

The Fat Burn program features two elevation peaks matched to an inverse speed curve. The overall goal of this program is to elevate your heart rate, maintain the elevated heart rate for most of the workout, then gradually bring your heart rate down via the last two cool down segments.



INTERMEDIATE

The Intermediate program features five elevation peaks matched to a challenging speed curve. The overall goal of this program is to vary your heart rate by elevating and lowering it several times, providing you with a challenging cardiovascular workout.



ADVANCED

The Advanced program features high elevations combined with top speeds for an all-out workout. The overall goal of this program is to raise your heart rate with both speed and elevation for an advanced cardiovascular workout.



INTERVALS

The Intervals program features high speeds and elevations alternating with low speeds and elevations. The overall goal of this program is to vary your workout load, taking you from peak level to recovery eight times throughout your workout.



ENDURANCE

The Endurance program features a max speed run, mated with max elevation. The overall goal of this program is to raise your heart rate with both speed and elevation for the ultimate cardiovascular workout.



SELECT PROGRAM

Press **PROGRAMS** at any time to display the programs selection screen. Scroll through the program previews with center “+/-” keys and select the program that best suits your desired workout by pressing **NEXT**. The display will now ask you to enter the program parameters.



SELECT PROGRAM MAXIMUM SPEED

The display will prompt you to set a Max Speed using the keypad or center “+/-” keys. This will scale the speed curve so that the maximum speed equals your selected Max Speed. Select your speed and press **ENTER**, **NEXT**, or wait three seconds.

Note: Intervals Program also asks for a minimum speed and grade.



SELECT PROGRAM MAXIMUM ELEVATION

The display will prompt you to set a Max Grade using the keypad or center “+/-” keys. This will scale the elevation curve so that the maximum elevation equals your selected Max Grade. Select your elevation and press **ENTER**, **NEXT**, or wait three seconds.



SELECT PROGRAM TIME



The display will prompt you to set a Program Time using the keypad or center “+/-” keys. You can enter a time between 10-99 minutes. This will scale the 20 segments of the program equally throughout your selected time. Select your time and press **ENTER**, **NEXT**, or wait three seconds.

Press the  button to begin.

As soon as you begin, the Program Progress Detail Screen becomes available. Whenever you enter this screen, your current segment speed, grade and remaining time will be displayed in the center. Press the “+/-” keys located on the sides of the center blue LCD screen to view the other segments of your program.

Prev. Segment	Current Segment	Next Segment
2.5 Speed	3.0 Speed	3.5
4% Grade	4% Grade	5%
0:30 Time	0:26 Time	0:30

If you wanted to run the Advanced Program with a program time of 25:00 minutes, a maximum speed of 4.5mph, and a maximum elevation of 6%, you would...

1. Press the  button.
2. Press center “+” key 2 times and then **NEXT**.
3. When asked to enter Max Speed, press “4”, “5”, **ENTER** on the keypad.
4. When asked to enter Max Grade, press “6”, **ENTER** on the keypad.
5. When asked to enter Program Time, press “2”, “5”, **ENTER** on the keypad.
6. Press the  button to begin.

Push **NEXT** at any time to view any of the other display screens during your program, including the Program Profile Screen which displays a comprehensive program overview. When you are in a display screen other than the Program Progress Detail Screen during a segment change, the display will temporarily show the Program Progress Detail Screen then bring you right back to the screen you were in. During a segment change, the speed and/or elevation windows will flash but only if there is a change in either of them.

NOTE: All numeric entries can also be entered or modified by adjusting the entry value with the center “+/-” keys.

The Cardio Trainer has storage capacity for five User Program Profiles, which you can create and change. The treadmill will remember these programs even if you unplug it from the wall. Edit Mode allows you to edit the speed, elevation and time for each of the 20 program segments **without actually exercising on the treadmill**.

Follow these steps to edit the User Program using Edit Mode:



SELECT PROGRAM

Press **PROGRAMS** at any time to display the programs selection screen. Scroll through the program previews with the center “+/-” keys and select one of the five User Programs.



USER PROGRAM PREVIEW

Notice that the User Program Preview Screen not only shows you the program overview, but the total program time as well. Press **ENTER**, **NEXT**, or wait three seconds.

The screen will read, “**PRESS START TO BEGIN OR NEXT TO EDIT**”, **PRESS NEXT** to enter **EDIT MODE**

Edit User 1	Segment 1	Segment 2
Press NEXT to toggle between Spd., Grd., Time.	3.0 Speed	5.0
Press +/- to change sess.	0% Grade	3%
	3:00 Time	14:00

EDIT THE SEGMENTS

When you first enter Edit Mode, you will be in control of time for segment 1 (noted by the white banner behind the digits). You can use the numeric keypad to change that value. Press **NEXT** to toggle between speed, grade and time values for that segment.

MOVING FROM SEGMENT TO SEGMENT Use the center “+/-” keys to move from segment to segment.

Segment 3	Segment 4	Segment 5
3.0 Speed	0.5 Speed	
0% Grade	0% Grade	
3:00 Time	END Time	

CREATING A PROGRAM WITH LESS THAN 20 SEGMENTS

Once you’ve created your last segment, go to the following segment and set time to “0”. The time will now read **END**. This means that your User Program will end with the completion of the previous segment.

EXITING EDIT MODE

Once you have completed editing your User Program, you can start your User Program by simply pressing **START** at any time. If you attempt to advance the cursor past the 20th segment, you will be prompted with “**PRESS START TO BEGIN OR NEXT TO EDIT**” screen. You can also exit Edit Mode by pressing Manual Mode, HRC, or Programs at any time. Any changes you make during Edit Mode are permanently saved in that User Program even if you unplug the treadmill.

If you wanted to create a 2-segment User Program where you first walked at 2MPH at 1% Grade for 30 seconds and then ran at 5.5MPH at 7% Grade for 10 minutes you would...

1. Press the **PROGRAM** button.
2. Press center “+” key 5 times and then **NEXT**.
3. Press **NEXT** to enter **EDIT MODE**.
4. To edit the 1st segment’s time press “3”, “0”, **ENTER**.
5. To edit the 1st segment’s speed, press “2”, “0”, **ENTER**.
6. To edit the 1st segment’s grade press “1”, **ENTER**.
7. To move to the 2nd segment press center “+” key.
8. To edit 2nd segment’s time press “1”, “0”, “0”, “0”. **ENTER**.
9. To edit the 2nd segment speed press “5”, “5”, **ENTER**.
10. To edit the 2nd segment grade press “7”, **ENTER**.
11. To move to the 3rd segment press center “+” key.
12. To make the 2nd segment your last segment press “0” **ENTER** so time value reads **END**.
13. Press **START** to start the program.

Whenever you run one of your User Programs and adjust speed or elevation during your workout, the changes you make will be stored as the new User Program.

Follow these steps to run a User Program:



SELECT PROGRAM

Press **PROGRAMS** at any time to display the programs selection screen. Scroll through the program previews with the center “+/-” keys and select one of the five User Programs.



USER PROGRAM PREVIEW

Notice that the User Program Preview Screen not only shows you the program overview but the total program time as well. Press **ENTER**, **NEXT**, or wait three seconds.

**PRESS START TO BEGIN
OR NEXT TO EDIT**



The screen will read, “PRESS START TO BEGIN OR NEXT TO EDIT”,

Press the  button.

As soon as you begin, the Program Progress Detail Screen becomes available. The speed and grade values of your current segment are displayed in the center and side screens. If you want to change the current speed or grade of your current segment adjust it to your liking by pressing speed or grade “+/-” keys. Next time you run this program the segment you have modified will be stored to these new settings.

Prev. Segment	Current Segment	Next Segment
2.5 Speed	3.0 Speed	3.5
4% Grade	4% Grade	5%
0:30 Time	0:26 Time	0:30

If you wanted to run for 30:00 minutes and edit User Program 1 as you go by adjusting the speed and elevation during the workout, you would...

1. Press the  button
2. Press center “+” key 5 times and then **NEXT**.
3. When asked to enter Program Time, press “3”, “0”, **ENTER** on the keypad.
4. Press  to start the program.
5. Adjust the elevation and/or speed during your workout to customize your User Program.

These specialty programs have been designed to monitor and achieve a specific goal you may have every time you get on your Cardio Trainer. Whether you want to go for a 3-mile run, burn 1,000 calories, or simply exercise for 15 minutes, the Goal Progress screen will accurately assess your progress with a variety of stats. During these programs you will retain full manual control.

Using Specific Goal Programs



TIME GOAL PROGRAM:

The display will prompt you to set a Program Time Goal using the keypad or “+/-” center keys. You can enter a time between 10-99 minutes. Select your time and press **ENTER**, **NEXT**, or wait three seconds.



DISTANCE GOAL PROGRAM:

The display will prompt you to set a Program Distance Goal using the keypad or “+/-” center keys. You can enter a distance between 0.1-99.9 miles (km in metric). Select your distance and press **ENTER**, **NEXT**, or wait three seconds.



CALORIE GOAL PROGRAM:

The display will prompt you to set a Program Calorie Goal using the keypad or “+/-” center keys. You can enter a calorie goal between 10-9,999 calories. Select your calories and press **ENTER**, **NEXT**, or wait three seconds.



Press the  button.

As soon as you begin, the Goal Progress screen becomes available. This screen shows your Specific Goal, time remaining until completion, and other statistics. If you are in the Distance or Calorie Goal programs, your goal statistic will be counting down (noted by negative sign).

DISTANCE	DISTANCE GOAL	CALORIES
- 2.09		48
PACE	2.5	CAL/HR
7:30	TIME REMAINING	972
LAP		PULSE
1	15 MIN 30 SEC	♥ 128

Push **NEXT** at any time to view any of the other display screens during your program.

If you wanted to burn 650 calories in the Calorie Goal program you would...

1. Press the  button.
2. Press center “-” key 2 times and then **NEXT**.
3. When asked to enter **CALORIE GOAL**, press “6”, “5”, “0”, **ENTER** on the keypad.
4. Press  to begin.

The Cardio Trainer is equipped with both Contact Heart Rate and Wireless Heart Rate (transmitter strap). Heart Rate Control programs require the use one of them.

The Cardio Trainer has the ability not only to display your heart rate, but also to automatically vary the speed and elevation based upon your heart rate via its Heart Rate Control (HRC) programs. Target training allows you to maximize your workout performance while minimizing your workout time.

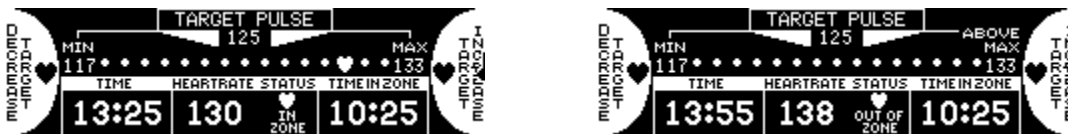
Program Protocols: HRC vs. Interval HRC

- HRC Program maintains the user's heart rate at the target throughout the duration of the training segments.
- Interval HRC Program alternates between the target and 80% of target, giving the user an opportunity to exercise at different intensity levels.

Segment	Stage	% of Target Heart Rate	
		HRC	Interval HRC
1	Warm up	70	70
2	Warm up	80	80
3	Warm up	90	90
4-18	Training	100	Alternating 100 & 80
19	Cool Down	90	90
20	Cool Down	80	80

Whether you are in a Heart Rate Controlled Program or in Manual Mode, the Cardio Trainer allows you to accurately monitor your heart rate via its Heart Rate Status Screen. To access it, simply press **NEXT** to scroll through the selectable displays in the center LCD.

Heart Rate Status Screen:



Features:

- HEARTRATE STATUS
- TIME IN TARGET ZONE
- TOTAL TIME
- MINIMUM, MAXIMUM, WARMUP, TARGET, AND COOL DOWN PULSE
- ANIMATED ZONE HEART AND ZONE LIMITS
- ADJUSTABLE TARGET PULSE

Follow these steps to run an HRC program:



SELECT PROGRAM

To select an HRC program press the HRC button. Scroll through the program previews with center “+/-” keys and select HRC or INTERVAL HRC by pressing **NEXT**.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
MAX
SPEED**

3.5

SELECT PROGRAM MAXIMUM SPEED

The display will prompt you to set a Max Speed using the keypad or center “+/-” keys. Select your speed and press **ENTER**, **NEXT**, or wait three seconds.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
MAX
GRADE**

5%

SELECT PROGRAM MAXIMUM GRADE

The display will prompt you to set a Max Grade using the keypad or “+/-” center keys.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
TARGET
PULSE**

125

SELECT TARGET PULSE

The display will prompt you to enter your Target Pulse using the keypad or center “+/-” keys. This will set the target pulse and the treadmill will vary the speed and elevation in an effort to reach this heart rate.

Select your target pulse and press **ENTER**, **NEXT**, or wait three seconds.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
PROGRAM
TIME**

20:00

SELECT PROGRAM TIME

The display will prompt you to set a Program Time using the keypad or “+/-” center keys. For HRC, you can enter a time between 20-99 minutes. This will scale the 20 segments of the program equally throughout your selected time.

Select your time and press **ENTER**, **NEXT**, or wait three seconds.

Press the  button.

Remember, you can adjust the program's target heart rate in the middle of your workout in the Heart Rate Status Screen using the center “+/-” keys

If you wanted to work out with the HRC program with a maximum speed of 4 mph, a maximum grade of 5%, a target pulse of 140, for 30:00 minutes, but you realize into the program that your Warm Up Pulse (98 bpm) is too difficult and want to lower it to 88 bpm, you would...



1. Press the  button.

2. **NEXT** to select the Heart Rate Control Program.

3. When asked to enter Max Speed, press “4”, “0”, **ENTER** on the keypad.

4. When asked to enter Max Grade press “5”, “0”, **ENTER** on the keypad.

5. When asked to enter Target Pulse, press “1”, “4”, “0”, **ENTER** on the keypad.

6. When asked to enter TIME, press “3”, “0”, **ENTER** on the keypad.

7. Press  to begin.

8. Press center “-“ key ten times so that the Warm Up Pulse lowers to 88 in the Heart Rate Status Screen.

User Heart Rate Control Programs

The User Heart Rate Control (HRC) program is designed to allow you to set the target heart rate for each of the 20 program segments during or before your workout.

To customize a User HRC Program during your workout, simply adjust your Target Heart Rate using the center “+/-” keys in the Heart Rate Status Screen. Any Target Heart Rate changes you make during your workout will be saved in that User HRC Program.

If you want to edit your User HRC Program before your workout, follow these steps:



SELECT PROGRAM

To select an HRC program to edit press the HRC button. Scroll through the program previews with the center “+/-” keys and select one of the 2 User HRC Programs to edit by pressing NEXT.



SELECT PROGRAM MAXIMUM SPEED

The display will prompt you to set a Max Speed using the keypad or center “+/-” keys. Select your speed and press ENTER, NEXT, or wait three seconds.



SET PROGRAM MAXIMUM GRADE

The display will prompt you to set a Max Grade using the keypad or “+/-” center keys. Select your grade and press ENTER, NEXT, or wait three seconds.

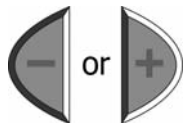
**PRESS START TO BEGIN
OR NEXT TO EDIT**

The screen will read, “PRESS START TO BEGIN OR NEXT TO EDIT”. Press START to run the program displayed in the program preview or NEXT to enter Edit Mode and make changes.

Edit Hrc 1	Segment 1	Segment 2
Press NEXT to toggle between TrsHrt & Time.	87 TrsHrt	100
Press +/- to change seeg.	1:00 Time	1:00

EDIT MODE

When you first enter Edit Mode, you will be in control of the Time for Segment 1 (it's noted by the white banner behind the digits). You can use the numeric keypad to change that value. Press NEXT to toggle between Target Heart Rate and Time values of that segment.



MOVING FROM SEGMENT TO SEGMENT

Use the center “+/-” keys to move from segment to segment.

Segment 6	Segment 7	Segment 8
100 TrsHrt	50 TrsHrt	
1:00 Time	END Time	

CREATING A PROGRAM WITH LESS THAN 20 SEGMENTS

Once you've created your last segment, go to the following segment and set time to “0”. The time will now read END. This means that your User HRC Program will end with the completion of the previous segment.



EXITING EDIT MODE

Once you have completed editing your User HRC Program, you can start your User HRC Program by simply pressing START at any time. If you attempt to advance the cursor past the 20th segment, you will be prompted with “PRESS START TO BEGIN OR NEXT TO EDIT” screen. You can also exit Edit Mode by pressing Manual Mode, HRC, or Programs at any time. Any changes you make during Edit Mode are permanently saved in that User HRC Program even if you unplug the treadmill.

The Cardio Trainer includes three different Fitness Tests that measure your fitness level. Based on your specific age, gender, and performance they calculate your fitness level through three different protocols.

The Army 2 Mile Fitness Test:

Test Parameters

- Maximum Speed: At user's discretion
- Maximum Grade: Deactivated and set to 0%
- Maximum Heart Rate: Not part of test

Description

A manually controlled, flat ground, complete as fast as you can two-mile run. Upon completion you will receive a U.S. Army assessment score (0-100).



Balke Fitness Test (must use Accutrack or Wireless Chest Strap):

Test Parameters

- Maximum Speed: 4.4 mph (5 mph with an L9), controlled by treadmill
- Maximum Grade: 15% (12% with an L9), controlled by treadmill
- Maximum Heart Rate: 80% of Maximum Heart Rate (see *Heart Rate Monitoring*)

Description

A heart rate controlled, walking pace, variable incline fitness test. The test increases in difficulty in an effort to raise your heart rate to a target. Upon reaching your target heart rate, the test will terminate and calculate a fitness assessment based on your performance (VO₂ Max Score).



Firefighter (Gerkin) Fitness Test (must use Wireless Chest Strap):

Test Parameters

- Maximum Speed: 7 mph,
- Maximum Grade: 15% (12% with an L9), controlled by treadmill
- Maximum Heart Rate: 85% of Maximum Heart Rate (see *Heart Rate Monitoring*)

Description

A heart rate controlled, variable speed and incline fitness test. The test increases in difficulty in an effort to raise your heart rate to a target. Upon reaching your target heart rate, the test will terminate and calculate a fitness level based on your performance (VO₂ Max Score).



What is VO₂ Max?

A person's fitness level can be measured by the amount of oxygen his or her body can consume while exercising at maximum capacity. VO₂ Max is a measurement of the maximum amount of oxygen in milliliters an individual can use in one minute per kilogram of body weight. For years, only fitness trainers and doctors had access to this intricate fitness calculation. Fortunately, the Cardio Trainer not only takes care of all the complex VO₂ Max calculations, but also gives you simple evaluation anyone can understand.

Scores may vary due to different line voltages, component tolerances, and individual's affinity towards each test's parameters. For a more accurate VO₂ Max calculation, take the average of the two scores (Balke and Firefighter Fitness Test).

If you want to take the Army 2 Mile Fitness Test, follow these steps:



SELECT PROGRAM

Press **PROGRAMS** at any time to display the programs selection screen. Scroll through the program previews with the center “+/-” keys and select the Army 2 Mile Fitness Test by pressing **NEXT**. The display will now ask you to enter your age.



ENTER YOUR AGE

Using the keypad or center “+/-” keys, select your age from 10-99 and press **ENTER**, **NEXT**, or wait three seconds. This affects the scaling of the fitness score since it references the user’s demographics.



ENTER YOUR GENDER

Using the center “+” key, toggle between MALE and FEMALE to select your gender. Once your gender is displayed on the center display, press **ENTER**, **NEXT**, or wait three seconds. This affects the scaling of the fitness score since it references the user’s demographics.



Press the **START** button.

Complete the 2-mile run as fast as possible by manually controlling your speed (grade has been disabled). Hitting Pause, Stop, Manual, HRC, or Programs during the test will invalidate and terminate the test.

As soon as you begin, the Goal Progress screen becomes available. This screen shows your Specific Goal (2 Miles), time remaining until completion, Projected Score and other statistics. The distance statistic is counting down (noted by negative sign).

DISTANCE	ARMY 2 MILE RUN	CALORIES
- 0.99	PROJECTED SCORE 83	118
PACE	TIME REMAINING	CAL/HR
7:30		934
LAP		PULSE
4	7 MIN 25 SEC	128

Upon completion, you will receive a score 0-100 and fitness assessment based on your time and demographics.

Score	Rating
85-100	Excellent
70-84	Good
32-69	Average
17-31	Fair
0-16	Low

If you were 25 years old, a female, and wanted to take the Army 2 Mile Fitness Test, you would...

1. Press the button.
2. Press center “-” key 1 time and then **NEXT**.
3. When asked to enter YOUR AGE, press “2”, “5”, **ENTER** on the keypad.
4. When asked to enter YOUR GENDER, press center “+” key once and press **NEXT**.
5. Press to begin.

If you want to take the Balke Fitness Test, follow these steps:



SELECT PROGRAM

Press the HRC button at any time to display the HRC programs selection screen. Scroll through the program previews with center “+/-” keys and select the Balke Fitness Test by pressing **NEXT**. The display will now ask you to enter your age.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
YOUR
AGE**



ENTER YOUR AGE

Using the keypad or center “+/-” keys, select your age from 10-99 and press **ENTER**, **NEXT**, or wait three seconds. This determines the test’s target pulse and the scaling of the fitness assessment since it references the user’s demographics.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
YOUR
GENDER**



ENTER YOUR GENDER

Using the center “+” key, toggle between MALE and FEMALE to select your gender. Once your gender is displayed on the center display, press **ENTER**, **NEXT**, or wait three seconds. This affects the scaling of the fitness score since it references the user’s demographics.

Note: Before pressing start, you will be prompted with the heart rate that the fitness test will target. This heart rate calculation is derived from statistical heart rate capacity averages (see **Heart Rate Monitoring**). If you are uncomfortable with the target heart rate displayed or feel discomfort during any point during the fitness test, stop the test.

Press the  button.

You must hold on to the contact heart rate crossbar or wear your heart rate transmitter strap during the entire test. If the treadmill loses a heart rate signal for more than 30 seconds, the test will be invalidated and terminated.

This HRC fitness test is fully automated and will increase in difficulty from segment to segment until the user achieves the target heart rate (80% of maximum heart rate). Once you reach the target pulse, a 30 second countdown will follow and end the test. Any key-strokes during the test besides **NEXT** will invalidate and terminate the test.

As soon as you begin, the Heart Rate Status screen becomes available. This screen shows your Target Pulse, Time, Heart Rate Status, and Time in Zone.

Upon completion, you will receive a VO₂ Max score and fitness assessment based on your performance versus your demographics.



Men

AGE	<20	20-29	30-39	40-49	50-59	60-69	>69	RATING
VO ₂ Max	>65	>62	>58	>54	>52	>50	>48	SUPERIOR
	57-65	54-62	50-58	46-54	44-52	42-50	40-48	EXCELLENT
	47-56	44-53	40-49	37-45	35-43	32-41	30-39	GOOD
	37-46	35-43	32-39	28-36	26-34	24-31	22-29	AVERAGE
	<37	<35	<32	<28	<26	<24	<22	LOW

Women

AGE	<20	20-29	30-39	40-49	50-59	60-69	>69	RATING
VO ₂ Max	>62	>58	>54	>51	>47	>44	>42	SUPERIOR
	54-62	50-58	46-54	43-51	39-47	36-44	34-42	EXCELLENT
	42-53	39-49	35-45	32-42	29-38	25-35	23-33	GOOD
	34-41	32-38	29-34	25-31	22-28	19-24	15-22	AVERAGE
	<34	<32	<29	<25	<22	<19	<15	LOW

If you were 25 years old, a female, and wanted to take the Balke Fitness Test, you would...

1. Press the  button.
2. Press center “-” key 1 time and then **NEXT**.
3. When asked to enter YOUR AGE, press “2”, “5”, **ENTER** on the keypad.
4. When asked to enter YOUR GENDER, press center “+” key once and press **NEXT**.
5. Press  to begin.

If you want to take the Firefighter Fitness Test, follow these steps:



SELECT PROGRAM

Press **PROGRAMS** at any time to display the programs selection screen. Scroll through the program previews with center “+/-” keys and select the Firefighter Fitness Test by pressing **NEXT**. The display will now ask you to enter your age.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
YOUR
AGE**

35

ENTER YOUR AGE

Using the keypad or center “+/-” keys, select your age from 10-99 and press **ENTER**, **NEXT**, or wait three seconds. This determines the test’s target pulse.

USE +/- KEYS OR
NUMERIC KEYPAD
**ENTER
YOUR
GENDER**

MALE ♂

30
20
10
0
COUNT
DOWNING

ENTER YOUR GENDER

Using the center “+” key, toggle between **MALE** and **FEMALE** to select your gender. Once your gender is displayed on the center display, press **ENTER**, **NEXT**, or wait three seconds.

Note: Before pressing start, you will be prompted with the heart rate that the fitness test will target. This heart rate calculation is derived from statistical heart rate capacity averages (*see Heart Rate Monitoring*). If you are uncomfortable with the target heart rate displayed or feel discomfort during any point during the fitness test, stop the test.

Press the  button.

You must wear the heart rate transmitter strap during the entire test. If the treadmill loses a heart rate signal for more than 30 seconds, the test will be invalidated and terminated.

This HRC fitness test is fully automated and will increase in difficulty from segment to segment until the user achieves the target heart rate (85% of maximum heart rate). Once you reach the target pulse, a 30 second countdown will follow and end the test. Any keystrokes during the test besides **NEXT** will invalidate and terminate the test.

As soon as you begin, the Heart Rate Status screen becomes available. This screen shows your Target Pulse, Time, Heart Rate Status, and Time in Zone.

Upon completion, you will receive a VO_2 Max score and fitness assessment based on your performance versus the general population.

VO_2 Max	RATING
>59	SUPERIOR
50-58	EXCELLENT
40-49	GOOD
32-39	AVERAGE
<32	LOW

If you were 25 years old, a female, and wanted to take the Firefighter Fitness Test, you would...

1. Press the  button.

2. Press center “-” key 1 time and then **NEXT**.

3. When asked to enter **YOUR AGE**, press “2”, “5”, **ENTER** on the keypad.

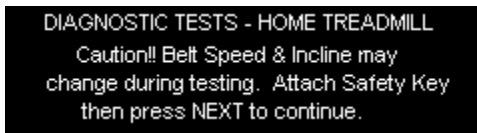
4. When asked to enter **YOUR GENDER**, press center “+” key once and press **NEXT**.

5. Press  to begin.

The Cardio Trainer is equipped with onboard self-diagnostics. If the treadmill experiences any errors during operation, the treadmill will display the error message. You will have the option to further investigate by commencing the treadmill's self-diagnostics software (see picture below).



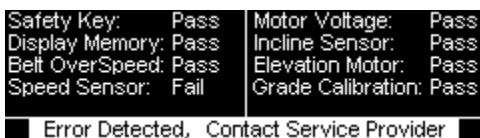
When you choose the option to enter diagnostics you will be prompted with a warning screen (shown below). After reading it, straddle the treadmill by stepping on the traction strips on the sides of the running surface and press **NEXT**.



The treadmill will now systematically test all of the individual components of the treadmill. During some of its tests, it will prompt you with simple "Yes or No" questions to assist with the diagnosis. Answer the questions using the center "+/-" keys when prompted (see picture below).



Once the Self-Diagnostics has completed all of the tests, it will read one of the two messages along the bottom: "No Errors Detected", or "Error Detected, Contact Service Provider".



Note: You can also manually enter self-diagnostics mode by pressing the center "+", "-", and START at the same time when the treadmill is off.

The Cardio Trainer treadmill comes standard with a wireless heart rate monitoring device and a contact heart rate crossbar (see *AccuTrack Heart Rate Monitoring System*) to give you feedback on how your body is affected by your workout. We will take a look at a few basic concepts of heart rate monitoring so you can better understand how it all works and how to maximize its use to allow you to reach the fitness level you desire.

What is exercise intensity?

Exercise intensity is simply a measure of how hard you are working at a given time during exercise. The American College of Sports Medicine (ACSM), the world's leading medical and scientific authority on sports medicine and fitness, recommends that every individual involved in an exercise program know how hard his/her body is working during exercise.

Your heart provides key information for determining how intensely you are working during exercise. Your heart rate (how many times your heart beats per minute) is really an efficiency rating for your entire body. The number of times your heart beats during each minute of exercise is a measurement of the intensity of the exercise. If your heart rate is low, exercise intensity is low; if your heart rate is high, your exercise intensity is high.

What is maximum heart rate?

Maximum Heart Rate (MHR) is the maximum attainable heart rate your body can reach before total exhaustion. True maximum heart rate is measured during a fatigue or "stress" test. This test must be done in a clinical setting and is not practical or accessible for most people. Fortunately, your maximum heart rate can be established with a high degree of accuracy using the following simple formula:

Estimated Maximum Heart Rate = 220 minus your age.

If John is 35 years old, what is his estimated maximum heart rate?

	220
	-35
John's Estimated Maximum Heart Rate =	185

WARNING: The use of this formula assumes no underlying heart or respiratory disease or other condition, which could be adversely affected by exercise. Consult your doctor before using this chart!!!

185 beats per minute is the estimated maximum number of times John's heart can beat before his body would fatigue or "max out." This number is extremely helpful because it tells us the absolute highest exercise intensity John can handle before his body wears out. The ACSM says that during exercise, John should keep his heart rate below his maximum so that he will not become exhausted and have to quit. In fact, the ACSM gives John a specific percentage range of his maximum heart rate to exercise in, known as his Target Heart Rate Zone.



Why should I monitor exercise intensity?

Your heart is the most important muscle in your body and, like all muscles, must be exercised regularly to remain strong and efficient. According to fitness experts, exercise is more effective when you work out in a specific heart rate range or zone. This is referred to as your Target Heart Rate Zone (THRZ) and is reflected by the number of beats per minute your heart pumps. This zone can vary greatly depending on your age, fitness level, and various other factors. If your heart rate is too low during exercise, your body reaps little or no benefit. This means you're not likely to see the results you want, like weight loss or increased endurance. If your heart rate is too high during exercise, you may tire too quickly and become frustrated, or even run the risk of injury.

Monitoring exercise intensity helps you to stay at a level of exercise that allows you to accomplish your goals. In fact, the ACSM recommends that, in order to get the most benefit from your cardiovascular exercise, you should work within your THRZ for at least 20 to 60 minutes per workout, 3 to 5 times per week. Knowing your exercise intensity (heart rate) will allow you to work at the right level of exercise to accomplish this.

How do I determine my Target Heart Rate Zone?

Your THRZ represents the minimum and maximum number of times your heart should beat in one minute of exercise. The ACSM recommends that all individuals should work within a Target Heart Rate Zone of 60% to 85% of Maximum Heart Rate. This means that your heart rate during exercise should not fall below 60% or rise above 85% of your maximum heart rate. Let's look at John from our earlier example. John is 35 years old, so his estimated maximum heart rate is 220 minus 35, or 185 beats per minute (bpm). The ACSM says that John should exercise between 60% and 85% of 185 beats per minute to stay in his THRZ. Let's determine John's THRZ:

John's Estimated Maximum Heart Rate:	185 bpm	
Lower Target Limit:	$185(\text{MHR}) \times 0.6$	111 bpm
Upper Target Limit:	$185(\text{MHR}) \times 0.85$	157 bpm
John's Target Heart Rate Zone	111-157 bpm	

111-157 beats per minute is the range or zone John will want to keep his heart rate in during exercise in order to achieve his goals. If John is a beginning exerciser, he'll want to stay at the low end of his THRZ. If John is a more advanced exerciser, he may want to work at the higher end of his THRZ to challenge himself more.

DIFFERENT INTENSITY LEVELS WITHIN A TARGET HEART RATE ZONE

Beginner:	60% of MHR
Weight Loss:	75% of MHR
Aerobic:	85% of MHR

What is a heart monitor?

A heart monitor is a device that calculates your pulse. It detects your pulse through two small electrodes that touch your skin and transmit the signal to a receiver in the treadmill. Some heart monitors are built onto treadmills (metallic grips), while others work wirelessly (chest strap).

The Cardio Trainer includes two separate heart rate monitoring systems: The wireless heart rate chest strap transmitter and the AccuTrack Contact Heart Rate Monitoring System.

Heart rate monitors

KEEPS YOU SAFE

Exercising too hard can put you at risk for injury. A heart rate monitor reminds you of the safe and effective heart rate intensity at which you should exercise and warns you when your workouts go too far.

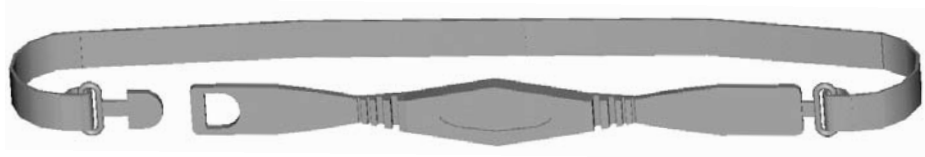
KEEPS YOU IN YOUR ZONE

If you want to reach your exercise goals, it's important to stay in your target heart rate zone during workouts. A heart rate monitor is your constant reminder of the intensity and quality of each workout session.

SAVES YOU TIME

Our heart rate monitor is wireless and easy to use, so you can view valuable heart rate information at any time during exercise without interrupting or stopping your workout.

WIRELESS HEART RATE CHEST STRAP TRANSMITTER (shown below)



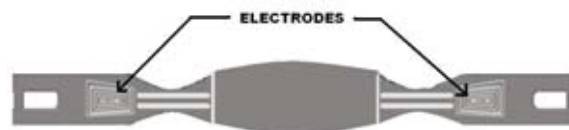
To use the Wireless Chest Strap follow these steps:

SECURE THE CHEST STRAP

Center the transmitter on the chest as high under the pectoral muscles (breasts) as possible. Tighten the strap so that the belt is as tight as possible without being uncomfortable.

APPLY CARDIO GEL TO THE ELECTRODES

A tube of Landice Cardio Gel was shipped with your Cardio Trainer treadmill. Pull the belt away from your chest and apply a small dab to each electrode. This will ensure a strong electrical contact between the transmitter and your chest.



The Heart Rate Transmitter works best against bare skin. Since sweat (saltwater) is an electrical conductor, the transmitter will work over a T-shirt if the shirt is wet with sweat. If you are having trouble getting an accurate pulse reading, try wearing the belt against bare skin.

CARE AND MAINTENANCE

The transmitter activates when the belt is properly wetted. In order to conserve battery life, wipe the electrodes dry when not in use. Clean monthly with mild soap and water and wipe dry. Do not use abrasives in cleaning, as they can cause permanent damage to the electrodes. Do not bend or stretch the electrode strips, especially when storing the belt transmitter.

The AccuTrack Contact Heart Rate Monitoring System™ can be used in place of the wireless chest strap to perform any of the following functions:

- Monitor your Time in Zone
- Control HRC programs
- Help you maintain your Target Pulse



1. Use the NEXT button to switch to one of the three screens that shows Pulse (see above).
2. Grab on to the pulse grips.
3. As soon as you put your hands on the grips a heart will beat on the display. This indicates that the system has been activated.
4. The heart will “beat” briefly and then display your heart rate. Your heart rate will be continuously monitored while your hands remain on the grips.



NOTE: *If you are wearing the wireless chest strap, the AccuTrack system will override the wireless signal while your hands are on the bar. Once you release the AccuTrack bar, the treadmill then default back to the wireless chest strap signal.*

NOTE: *You do not have to be viewing the Heart Rate Status screen for the AccuTrack system or wireless chest strap to function.*

The HRC programs will continue to make speed and elevation adjustments to keep you at your target heart rate while your hands remain on the grips. If you remove your hands the HRC programs will not make any speed or elevation changes until you place your hands on the grips again.

The AccuTrack system is designed to be used at walking speeds. A natural running motion involves using your arms to maintain balance. Since contact heart rate systems require your arms to remain stationary, we recommend using the system only at speeds of less than approximately 4 mph (6.4 km/h) or the fastest speed at which you are comfortable walking.

Should you walk or run?

This depends on several things such as body weight, fitness goals, and what you like to do. Walking is the safest, most compatible form of exercise for most people. If you're just starting out, are new to exercise, or participate in aerobic activities less than three times per week, we recommend that you walk. On the other hand, if you're an experienced runner, stick with your program — use your treadmill the way you want.

Here are some considerations to keep in mind:

- [1] If you're interested in weight control, walking can burn as many calories as a moderate running pace. To get a very small increase in caloric expenditure, you have to run fast and, for most people, the extra effort isn't worth it.
- [2] Your chance of losing weight successfully is far greater with walking. Walking increases your daily caloric expenditure, raises your metabolism, and is easier to stick with than running.
- [3] Heavy users should always walk until they've shed some extra pounds and are closer to their desired body weight. Extra weight means extra stress on joints and muscles, which in turn means residual muscle soreness.
- [4] If you're concerned about getting a "tough" workout and don't think walking is adequate, try walking up a hill! You can get just as much cardiovascular intensity (heart rate and breathing response) from walking as you can from running. Don't fool yourself with preconceived notions about walking — you can sweat just as much by walking as by running.

Take it easy! Walk. Lose weight in comfort. Avoid being sore and discouraged. After you've reached your target weight, reevaluate. If you like walking and want to stick with it, terrific. On the other hand, if some running is appealing, try it out and see what it's like. Just remember that walking will get you fit and keep you fit.

FREQUENCY OF EXERCISE

Walkers: Walk 3-6 times a week; 20-60 minutes per day.

Runners: Run 3-5 times a week; 20-60 minutes per day.

DURING YOUR WORKOUT

- Stay in the middle portion of the treadmill.
- Monitor your breathing. Can you carry on a normal conversation or are you out of breath? If you use the heart rate method of monitoring intensity, are you within the heart rate zone?
- Change the speed and incline as needed to stay within the breathing and heart rate criteria.

AFTER YOUR WORKOUT

- Drink a large glass of water (you'll recover faster).
- Do some light stretching exercises.
- Record that you completed the workout on your calendar.

KEEPING TRACK OF PROGRESS

- Keep a calendar that shows scheduled and actual workouts.
- Record every workout you complete.
- Compare planned with actual workouts completed. Aim for 90% completion. If you're averaging less than 90%, reevaluate your schedule and examine why you're missing 10% of your workouts (and the extra benefits from those missing workouts).

CALORIE COMPUTATIONS

- Calories and calories/hour are calculated using the formulas developed by the ACSM. There are two different equations. One is for walking and one for running. The ACSM uses the walking equation for speeds less than or equal to 3.7 mph. The running equations are used for speeds in excess of 3.8 mph.
- The computations are based on a 150-pound person, which is a close enough estimate for most people. If you wish the equations to be more precise, you may enter your weight into the treadmill (see *Getting Started*).

DANGER: Lethal voltages and moving parts capable of causing serious injury are exposed when the drive housing cover is removed. Under no circumstances should the motor cover be removed except by a Landice factory-authorized technician.

TRACKING (pre-set from factory, but may need adjustment during installation)

The treadbelt is tracked by means of the two 9/16" hex head bolts at the back end of the treadmill. Tightening (clockwise) the adjustment bolt on the side of the machine that the belt has moved towards, and loosening the bolt on the opposite side an equal amount, will cause the belt to move towards the center. Adjustments should be made with the treadmill running, and should be made in 1/4-turn increments. Allow at least 30 seconds for the belt to stabilize between each adjustment. Run the belt at high speed (6-8 mph). To insure proper belt tracking and alignment, the treadmill must be placed on a stable and level surface.

A yellow warning label will show at the rear of the treadmill when the treadbelt is not tracked correctly (L8 and L9 only).

TREADBELT TENSIONING (pre-set from factory, but may need adjustment during installation)

Need for tension is indicated by uneven belt speed, and may be sensed by sudden stopping of the treadbelt when your foot comes down on the belt. To check belt tension, run treadmill at 1 mph. Then, walk on machine. If belt does not feel like it is slipping/hesitating, then belt is tensioned correctly. If belt slips/hesitates, then belt is not fully tensioned. The same hex head bolts used for tracking also tension the treadbelt. To tighten the treadbelt, turn both bolts clockwise exactly the same amount a 1/4-turn at a time. Failure to turn them equally will affect belt tracking. **DO NOT OVER-TIGHTEN.** Continue checking for treadbelt slipping. Once treadbelt is fully tensioned, speed up treadmill to 5 mph. Then, while jogging lightly, check for any sudden slipping/hesitating of the treadbelt. Repeat treadbelt tensioning instructions if required.

MOTOR DRIVE BELT TENSIONING (pre-set from factory)

The drive belt is tensioned by a nut located under the motor pan. This nut is screwed to a hook, which is attached to the motor bracket. By turning the nut clockwise, you will tighten the nut pulling down the motor bracket, which will tighten the drive belt. **DO NOT OVER-TIGHTEN.** If you over-tighten this belt you will snap the motor shaft. To measure the tension, twist the drive belt between the motor and the drive roller. The ideal tension will allow you to twist the drive belt 45°. If you can twist the belt past 45°, it is too loose. If you cannot twist the belt to at least 45°, it is too tight.

**WARNING: Moving parts can cause serious damage.
Be sure to unplug treadmill before placing hands underneath the treadbelt!!!**

TREADMILL LUBRICATION & CLEANING

It is recommended that you vacuum around and underneath the treadmill on a monthly basis. Your treadmill will last longer and look better if you wipe the sweat off the unit after each workout.

Lubrication is not required on residential treadmills. In institutional settings Landice recommends lubricating the underside of the treadbelt with Landice SlipCoat on a monthly basis.

MOTOR BRUSHES

Motor brushes should be checked every six months on institutional treadmills and after six years on home units.

Service Check-List

- Tension and track treadbelt
- Lubricate belt and vacuum treadmill
- Check drive belt tension
- Check motor brushes

STEP 1



Insert the side rail into the upper rail clamp and tighten the bolt using a 1/2" socket. (Do not over-tighten.)

STEP 2



Fit the side rail to the bottom rail clamp.

STEP 3



Use a soft mallet to firmly set the rails inside the clamp.

STEP 4



Use a 3/16" allen wrench to tighten the rail clamp bolts. (Return to Step 9 in Assembly Instructions).



 **LANDICE L8**

 **LANDICE**

Worldwide excellence for over 40 years

111 Canfield Avenue, Randolph, NJ 07869 · 1-800-LANDICE · Tel. 973-927-9010 · Fax 973-927-0630 · www.landice.com