

Operation

Terms Used

This section lists some of the common terms and symbols used in this chapter. Other terms and symbols are listed in this chapter as appropriate. For setup options see Setup in the Assembly and Setup chapter.

Active Mode — *Active Mode* is when the running belt is moving. Before *Active Mode* begins, a three second countdown and “3...2...1” is displayed. *Active Mode* continues until the preset time limit is reached, the e-stop key is pulled out or the **STOP** key is pressed.

CardioTouch Screen — The *CardioTouch Screen* is the touch screen located in the handset area.

Cool Down — A reduction of work load for a short duration allows user to gently reduce heart rate. Cool Down occurs two minutes prior to completion of the workout-controlled workout sessions.

Dormant Mode — Occurs when unit is plugged in and not in use.

Manual Mode — In this active mode the user sets a goal for Time. The user controls speed and incline. Manual Mode continues until the goal is reached. Manual Mode is only available during Active Mode.




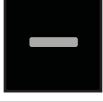






Pause Mode — Occurs only if the Pause feature is enabled and user selects the **STOP** key from Active Mode.

Quick Start — This begins by tapping the **Quick Start** icon. *Quick Start* enters *Active Mode* at minimum speed and 0% elevation with time counting up from 0:00.

Workout Review — Review of the accumulated workout data will happen at the end of each workout session.

User Control Symbols Used













Control	Control Name	Description
	INCLINE UP	Adjust Incline up.
	INCLINE DOWN	Adjust Incline down.
	SPEED UP	Adjust Speed up.
	SPEED DOWN	Adjust Speed down.
	VOLUME UP	Adjust Volume up.
	VOLUME DOWN	Adjust Volume down.
	CHANNEL/TRACK CONTROL	iPod - NEXT track A/V - Channel UP
	CHANNEL/TRACK CONTROL	iPod - PREVIOUS track A/V - Channel DOWN
	STOP	Press STOP once to end the workout session and start the <i>Workout Review</i> . Press STOP again to exit to <i>Dormant Mode</i> .
	FAN	Default speed is OFF during active mode. Press the FAN key to control fan speed. Choices are OFF, LOW and HI.

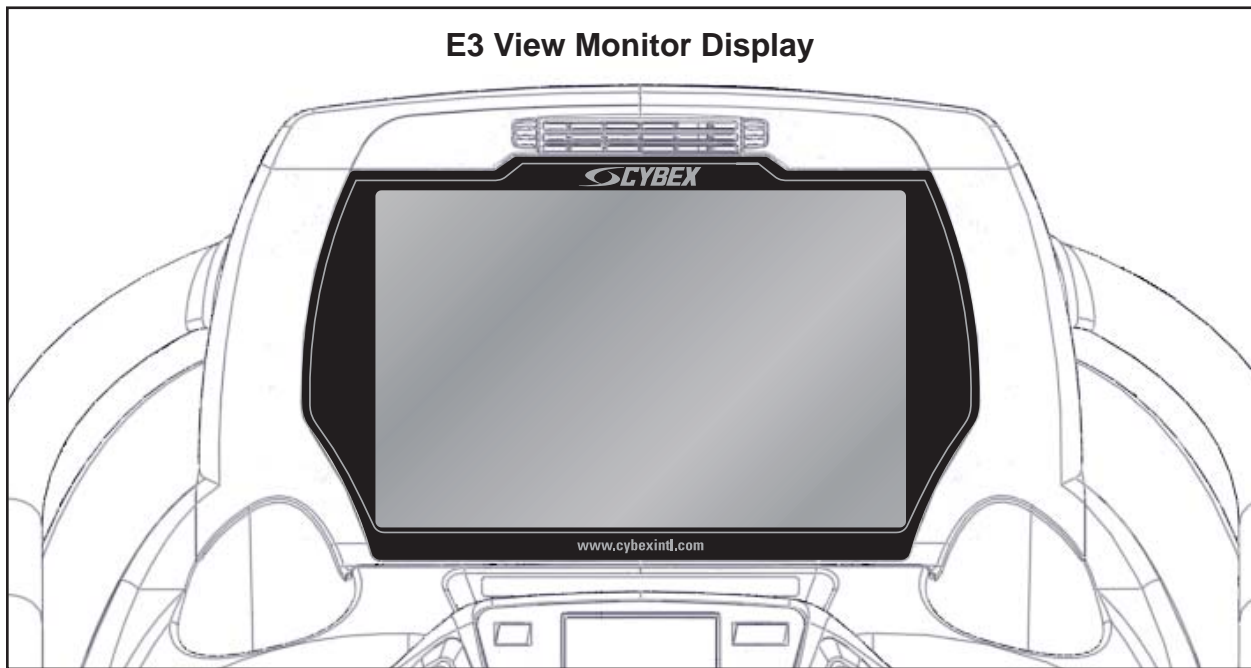
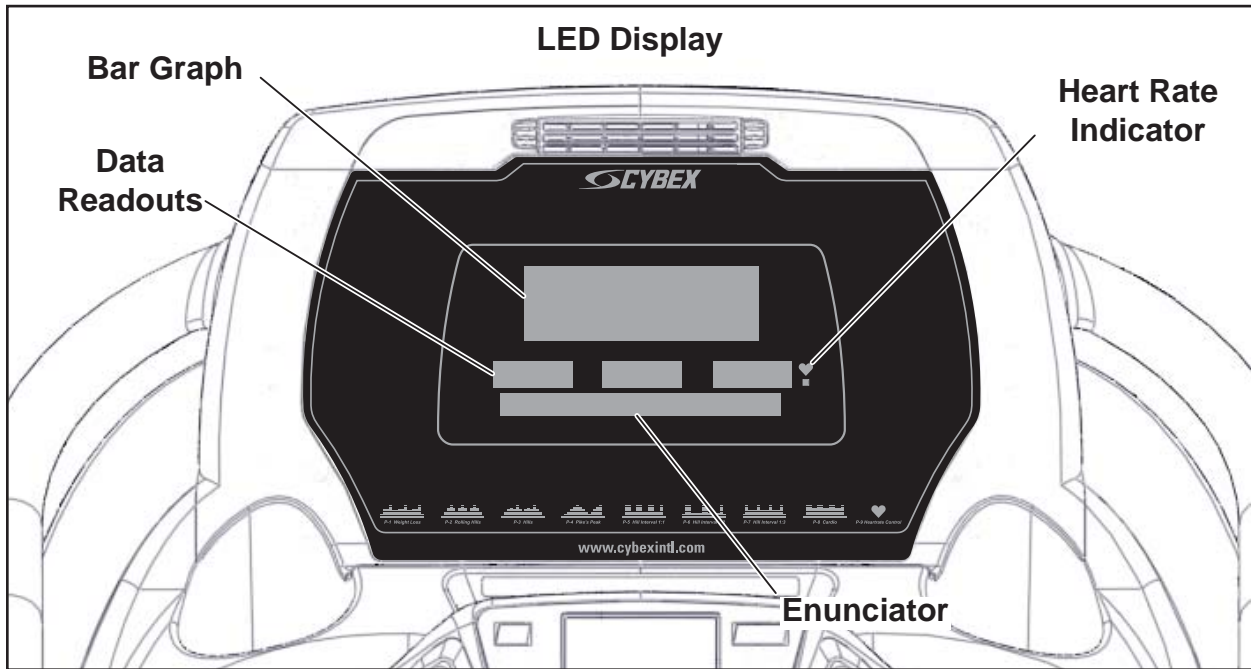
CardioTouch Symbols Used



Icon	Icon Name	Description
	QUICK START	<i>Quick Start</i> enters <i>Active Mode</i> at the default resistance with time counting up from 0:00.
	WORKOUTS	Tap <i>Workouts</i> icon to enter workout group selection.
	TV	Tap <i>TV</i> icon to enter TV control menu. If TV is not connected, icon will not be shown.
	TV + FM	Tap <i>TV + FM</i> icon to enter TV + FM control menu. If TV + FM is not connected, icon will not be shown.
	iPOD	Tap <i>iPod</i> icon to enter iPod control menu. If iPod is not connected, icon will be grayed out.
	HOME	Return to opening screen.
	START	Enter <i>Active Mode</i> .
	PAUSE	If pause feature is enabled, pause icon is shown. Press pause icon once to enter pause mode.
	STOP	If pause feature is disabled, stop icon is shown. Press stop icon or STOP button once to enter "Workout review".
	BACK	Return to previous or opening screen.
	UP LEVEL	Go up one level or return to iPod screen.

Icon	Icon Name	Description
	SHIFT LEFT	Shift the screen left to view more options.
	SHIFT RIGHT	Shift the screen right to view more options.
	KEYPAD	Numeric keypad for entering data.
	ENTER	Accepts the value shown.
	CLEAR	Clear any values selected.
	INFO	Select to provide more information and details.
	SCALE	Displays current value in the minimum and maximum range.
	SCAN	This icon defaults to SCAN, which displays the workout info on the upper display, changing every 5 seconds. Tap the SCAN icon to display different data sets. Tap again to change the data set, or multiple times to get back to SCAN.
	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access <i>Screen Lock</i> and <i>Toolbox</i> . See Preventive Maintenance section.
	LANGUAGE ICON	Tap language icon to select available languages. Set languages available in Setup Options section. Press and hold language logo for 6 seconds to access <i>Screen Lock</i> and <i>Toolbox</i> .

Console Display



CardioTouch Screen and User Controls



1	Incline keys	6	Volume Keys
2	Incline display	7	STOP Key
3	CardioTouch screen	8	Fan Key
4	Speed display	9	Channel/Track Keys
5	Speed Keys		

CardioTouch Screen — Tap the icons to make selections.



Quick Operation Guide

Maximum user weight is 400 lbs. (181 kg).

The following is a quick overview of the operation of the treadmill. For more information read *Detailed Operation Guide* in this chapter.



WARNING: Falling hazard.

When starting unit

- Stand on two top steps.
- Do not stand on belt.

1. Place your feet on the two top steps located on each side of the running belt.
2. Clip the e-stop clip onto your clothing and test it as described under *Emergency Stop* in the *Safety* chapter.
3. Tap **QUICK START** on the CardioTouch screen.



The treadmill begins a countdown, “3...2...1,” after which it accelerates the belt to 0.5 mph (0.8 kph) and enters Active Mode.



4. Hold the handrails while you step onto the running belt and begin walking.
5. Press the **Speed + –** keys to change the belt speed at any time. The right display will show speed.
6. Press the **Incline ▲ ▼** keys to change the incline at any time. The left display will show incline.
7. Press the **Stop** key at any time to stop the running belt. “Workout Review” is displayed and the incline returns to 0%.

Detailed Operation Guide

Maximum user weight is 400 lbs. (181 kg).



WARNING: Falling hazard.

When starting unit

- Stand on two top steps.
- Do not stand on belt.

1. Place your feet on the two top steps located on each side of the running belt.
2. Clip the e-stop clip onto your clothing and carefully test the e-stop key to ensure it will activate in case of an emergency. See Emergency Stop Key (e-stop) in the Safety Chapter for properly testing the e-stop key. Also, see Stopping the Treadmill in this chapter for further information about the e-stop key. Be sure the string is free of knots and has enough slack for you to run comfortably with the e-stop key in place.
3. Select **QUICK START** or **WORKOUTS**.

To select a workout category, tap one of the workout category icons from the workout options screen.



To select a workout, tap one of the workout icons from the workouts screen.



Upon entering a workout the display will guide you through the appropriate settings. This is referred to as Workout Setup Mode. If the **Start** key is pressed now, all defaults for that workout will be accepted. After 10 seconds, if no key has been pressed, the first default will be accepted. After another 10 seconds the second default will be accepted and so on until the last default.



For the most accurate resistance and calorie count, you must set your correct weight before beginning your workout (including clothing).

When selecting a workout you must tap the **Enter** icon after each adjustment of *Time*, *Level* or *Weight*.

4. Press the **Start** key.

The treadmill begins a countdown, “3...2...1” and sounds a tone for each count. When it reaches one (1) the treadmill gives a longer tone and then starts accelerating the belt. In *Manual Mode* the belt will begin accelerating to 0.5 mph (0.8 kph) and the incline will remain at zero percent. In a workout the belt will begin accelerating and the incline will change to the corresponding speed and incline of the workout and level you selected.



5. Hold the handrails while you step onto the running belt and begin walking.

6. Observe the control panel. The top center *Bar Graph* display shows a graphical representation of the relative incline changes, and if in a program, will show the relative intensity changes that are coming up. The *Text Area* will start showing the workout data such as Distance, Calories, Heart rate (if available), MET and Pace (Minutes per Mile or Minutes per Km). The data displays will start by automatically shifting every 5 seconds.

Heart rate will be displayed in lieu of MET if a valid heart rate is available from a wireless chest strap (not included) or by holding the contact heart rate grips.

When you adjust incline in a workout, the change will affect only the current segment. The program control will resume starting with the next segment. To increase or decrease overall intensity, adjust the speed and/or the program level.

7. Press the **Speed + –** keys to change the belt speed at any time. The right display will show the set speed.

8. Press the **Incline ▲ ▼** keys to change the incline at any time. The left display will show the set incline.

9. Press the **Stop** key at any time to stop the workout. “Workout Review” is displayed and the incline returns to 0%.



If the e-stop key is removed during a workout, the drive motor power shuts off immediately, causing the belt to stop. “Emergency Stop!” is displayed. Replacement of the e-stop key causes *Workout Review* to begin.

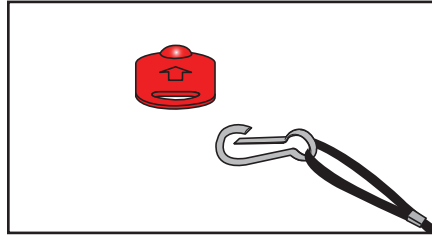
When a program is complete the treadmill begins a countdown, “3...2...1” and sounds a tone for each count. The belt slows to a stop, the incline returns to 0% and Workout Review is displayed for the preset time or until you press the **Home** key.

The treadmill returns to *Dormant Mode*.

Stopping the Treadmill

Press **Stop** once to end the workout session and start the Workout Review. The treadmill will perform a controlled belt stop and bring the incline to 0%. The accumulated data or the results of the Fitness Test will be displayed for the duration configured in Setup for Review Time. Press **Stop** again to exit to Dormant.

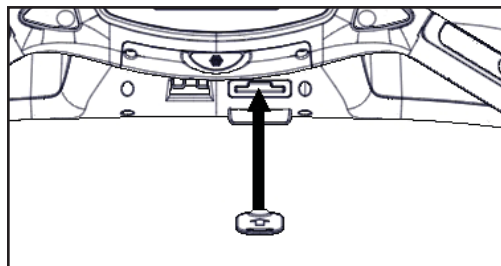
The function of the immobilization method: The purpose of immobilizing the treadmill is to prevent unauthorized use. This can be accomplished by removing the e-stop key from the treadmill, unclipping it from the cord and putting it in a non-accessible place.



The emergency dismount: Follow the steps listed below if you experience pain, feel faint or need to stop your treadmill in an emergency situation:

1. Grip handrails for support.
2. Step onto the top steps.
3. Pull the e-stop key off the console.

The function of the emergency stop: The e-stop key functions as the emergency stop. In an emergency situation, remove the e-stop key from the treadmill and the running belt will come to a stop.



Safety Sentry



WARNING: Falling hazard

- Place your feet on the two top steps when starting or stopping the treadmill.
- Wear the e-stop clip at all times.

The treadmill uses sensors to determine if you are on the running belt. When using the treadmill, exercise in the center of the running belt, and between the end of the handrails and the console. If you step off of the treadmill during a workout, the treadmill is designed to detect your absence and if a user is not detected, the console will beep twice and display "Are you there? Touch the screen to continue". If there is no response in 20 seconds, the treadmill will exit Active Mode and the running belt will stop.

An unattended, running treadmill can create an unsafe environment for a user. The Safety Sentry feature is intended to allow the treadmill to stop the running belt when the treadmill is unattended. To avoid the treadmill running unattended, follow these steps:

- At the end of your workout, verify that the running belt is stopped by visually checking the Cybex logo on the running belt, it should not be moving.
- If the belt is moving, place feet on both sides of the top step and press “Stop” or remove the e-stop key from the treadmill.

Workout Selection

Quick Start

Press **Quick Start**. Control speed and incline.

Workout Choices:

Name	Levels	Settings	Results
Weight Loss			
Speed Bump	10	Choose goal - Time, distance, or calorie.	
Rollers	10	Choose goal - Time, distance, or calorie.	
Hills	10	Choose goal - Time, distance, or calorie.	
Peaks	10	Choose goal - Time, distance, or calorie.	
Cardio			
Hill Interval 1:1	10	Choose goal - Time, distance, or calorie.	
Hill Interval 1:2	10	Choose goal - Time, distance, or calorie.	
Hill Interval 1:3	10	Choose goal - Time, distance, or calorie.	
Interval Plus	10	Choose goal - Time, distance, or calorie.	
Heart Rate Control	N/A	Choose goal - Time, distance, or calorie.	
Tests			
Gerkin Protocol	Walk/run	Weight, age, and gender.	VO2 max
Army PFT	2 mile/3.2 k run	Weight, age, gender, and starting speed.	Points
Air Force PFT	1.5 mile/2.4 k run	Weight, age, gender, and starting speed.	Points
Navy <5K PRT	1.5 mile/2.4 k run under 5000 feet	Weight, age, gender, and starting speed.	Points
Navy >5K PRT	1.5 mile/2.4 k run over 5000 feet	Weight, age, gender, and starting speed.	Points
Marines PRT	3 mile/4.8 k run sea level	Weight, age, gender, and starting speed.	Points
Marines 4500 PRT	3 mile/4.8 k run 4500 feet	Weight, age, gender, and starting speed.	Points
One Mile Test	1 mile/1.6 k walk	Weight, age, gender, and starting speed.	VO2 max

PFT means Physical Fitness Test, PRT means Physical Readiness Test.

See Appendix for workout details

Control During Operation

Control keys are usable during operation and may be pressed at any time to make adjustments in speed, elevation or data readouts. The **Speed** and **Incline** keys are located near the hand grips, allowing for thumb adjustments without removing your hands from the hand grips.

Changing Speed — Press the **Speed + –** keys to change the speed in increments of 0.1 mph or 0.1 kph. Minimum to maximum speed is from 0.5 - 12.4 mph (0.8 - 20 kph).

Changing Incline — Press the **Incline ^ v** keys to change the elevation in increments of ½% increments up to 10%, then 1% up to 15%. Press multiple times to change incline setting or hold the key to auto-repeat. Elevation is defined as the ratio of rise or fall over run of the treadmill deck.

Changing between active mode or workouts — You can make changes during your workout. Press **WORKOUTS** to select another workout, **Manual** to select Manual Mode, or **Goal** to change your Time, Distance, or Calorie Goal. Follow screen prompts to begin the new workout.

Data Readouts

As you exercise, the treadmill keeps track of the following data:

BPM (Beats Per Minute) — Your current heart rate. Heart rate will appear when a signal is introduced. Use the hand grips for Contact Heart rate or wear a Polar® compatible heart rate chest strap.

Calories — The total accumulated calories burned during your workout. Your weight must be correctly set before beginning your workout for this measurement to be most accurate.

Calories Per Hour — Calculation of present workload's energy exertion in Calories per Hour.

Distance — The total accumulated distance, in miles or kilometers, during your workout. Depending on the defaults you've chosen this measurement will show in English or Metric.

Metabolic Equivalent (MET) — Relates to the user's energy expenditure. A MET is a basic unit of measurement that is used to compare relative work between individuals and activities. 'One MET' is the amount of oxygen consumed at rest. For example, two MET would be twice that amount. If an individual were working at four MET he/she would be consuming oxygen at a rate equal to four times their resting consumption. MET can be used to compare walking on a grade with running or even to cycling and other activities.

Pace — At your current speed, how long it would take to cover a mile (or kilometer), displayed in minutes:seconds.

Time — The total time you've been working out or time remaining. Display time as *hours:minutes*.

Watts — Present workload energy exertion.

Heart Rate Indicator






Contact Heart Rate — Lightly hold hand grips on the handlebar ensuring that hands are clean and contact both the front and back sensors of each grip. A heart rate will display in typically 30 seconds or less.

Factors that interfere with heart rate signal:

- hand lotions
- oils or body powder
- excessive dirt
- excessive movement
- body composition
- hydration
- too loose grip
- too tight grip
- resting or leaning on grips

Wireless Heart Rate — To use this feature, a Polar® compatible heart rate transmitter belt (not included) must be worn.

Once the actual heart rate is determined, the LED is blinking to the displayed BPM and the Heart LED lights up. The color of the light represents a scale of low to high target heart rate.

	Blue	0 – 69 BPM
	Green	70 – 93 BPM
	Yellow	94 – 119 BPM
	Blood Orange	120 – 169
	Magenta	170 and higher

Meaning of % Grade

A 1% grade is not the same as a 1 degree incline. The % grade is the relationship of the measurement of rise over the measurement of run (also called slope). For example, a 1 foot (meter) rise in height over a length of 100 feet (meters) is a 1% grade. Expressed as a mathematical formula, the grade is calculated as follows: $1 \text{ ft. (m)} / 100 \text{ ft. (m)} = 0.01 = 1\%$

With respect to treadmills, the percent grade is roughly equal to the increase in height (rise) of the treadmill divided by the length (run) of the treadmill.

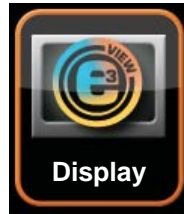
The degree of incline can be related to % grade by taking the Arctangent of the grade. For instance, 15% grade is equal to 8.53 Degrees ($\text{ArcTan}(.15)=8.53^\circ$). The opposite is true to determine % Grade from Degree of incline ($\text{Tan}(8.53^\circ)=.15$).





Fan Control

The fan defaults to the “OFF” setting. The user can change to “Fan Low”, “Fan High”, or “Fan Off” setting by pressing the appropriate control key.

E3 View Monitor Screen Options

During operation four E3 View Monitor screen options are available. Press E3 View Monitor icon to change screens.



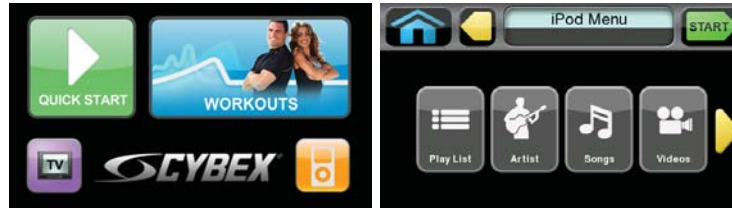
	TV + Data	Display video with data at bottom of screen
	TV Only	Display video only
	Data Only	Display data only
	Blank	Screen is blank, video and data are not displayed

iPod Functions

Connecting an iPod — Connecting an iPod to the 770T allows the unit to control the iPod through the CardioTouch screen and charges the iPod.

1. Connect iPod (not supplied) into the 30 pin connector exiting the console.
2. Place iPod (not supplied) onto the storage area above the controls located at base of console.

iPod Playlist — Select the iPod icon to display the iPod navigation screen.

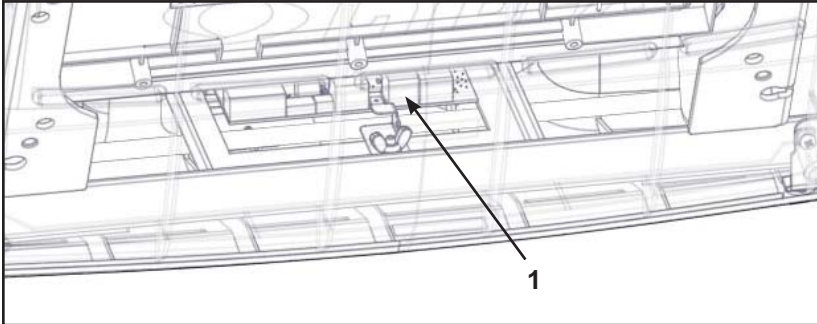


- If iPod is already playing use the standard iPod controls.
- If iPod is *Dormant* make a selection from the iPod Menu.
- Once a selection is made from the iPod menu, make further selections until the desired media is found.

CSAFE Port

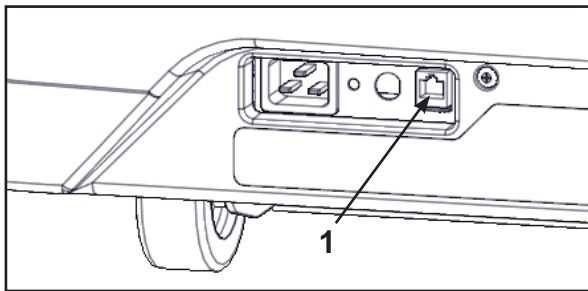
The CSAFE standard defines a communication protocol and low-voltage DC power source specific to the Fitness Equipment Industry. These RJ-45 phone jacks are provided for use ONLY within the CSAFE protocol. For more information on CSAFE standard, visit www.fitlinxx.com/csafa.

Console CSAFE port location (Inside console)



	Description
1	CSAFE port (Red)

Optional CSAFE location (Front of unit)



	Description
1	CSAFE port

Log in

When unit is connected to a CSAFE network, the user is prompted to login at startup "Enter your club ID#".

Enter your club ID# using the keypad located on the CardioTouch screen.

