

# Operation

## Intended Use

The intended commercial use of this machine is to aid exercise and improve general physical fitness.

## Terms Used

**Active Mode** – Any time the unit is controlling resistance and accumulating workout data. Active Mode begins after tapping **QUICK START** icon during the initial count-down screen, after completing the setup for a workout, or by default if the initial count-down screen times out and enters Quick Start mode.

**Auto-Scan** – Display automatically cycles through workout data.

**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 session.

**Dormant Mode** – Occurs when unit is plugged in with optional AC adapter and not in use.

**Muscle Map** – An anatomical representation of the human body with primary muscle groups lit by multi-color LED's. The color of the LED displays which muscle groups are targeted and the relative intensity of the exercise.

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

**Workout Group** – This begins after tapping the **WORKOUTS** icon. Select from available workouts.

**Quick Start** – Tap the **QUICK START** icon to enter into Quick Start Mode, where the user controls the Incline and Resistance as time counts up. Also occurs after 40 seconds of the user striding and not interacting with the console.











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



Read and understand all warnings and cautions in the Safety Section and all operation instructions in this chapter before operating unit.

User Control Symbols Used





Control	Control Name	Description
	<b>INCLINE UP</b>	Adjust <b>Incline</b> up.
	<b>INCLINE DOWN</b>	Adjust <b>Incline</b> down.
	<b>RESISTANCE UP</b>	Adjust <b>Resistance</b> up.
	<b>RESISTANCE DOWN</b>	Adjust <b>Resistance</b> down.
	<b>VOLUME UP</b>	Adjust <b>Volume</b> up.
	<b>VOLUME DOWN</b>	Adjust <b>Volume</b> down.
	<b>CHANNEL/TRACK CONTROL</b>	iPod - <b>NEXT</b> track. A/V - Channel <b>UP</b> .
	<b>CHANNEL/TRACK CONTROL</b>	iPod - <b>PREVIOUS</b> track. A/V - Channel <b>DOWN</b> .
	<b>STOP</b>	If pause feature is enabled, press <b>STOP</b> once to enter pause mode.
	<b>FAN</b>	Default speed is <b>OFF</b> during active mode. Press the <b>FAN</b> key to control fan speed. Choices are OFF, LOW and HI.








**CardioTouch Symbols Used**



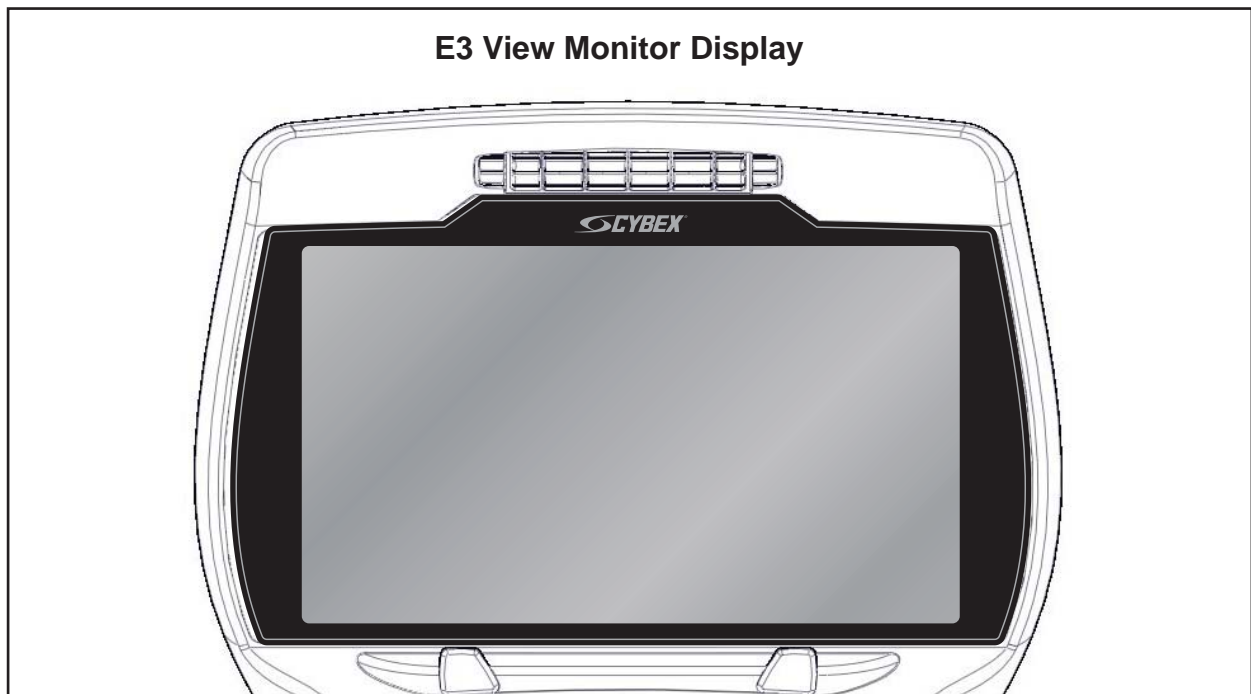
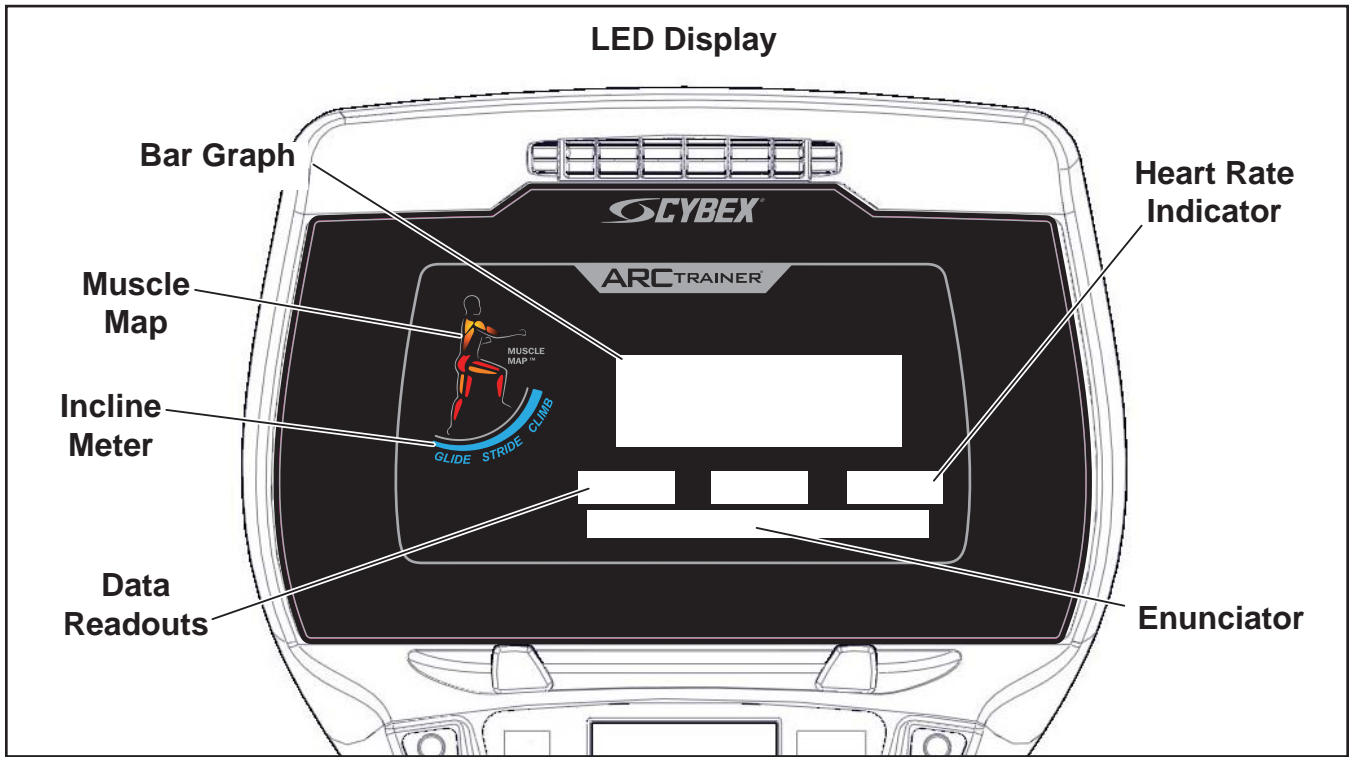
Icon	Icon Name	Description
	<b>QUICK START</b>	<i>Quick Start</i> enters <i>Active Mode</i> at the default incline and resistance with time counting up from 0:00.
	<b>WORKOUTS</b>	Tap <i>Workouts</i> icon to enter workout group selection.
	<b>TV</b>	Tap <i>TV</i> icon to enter TV control menu. If TV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

Icon	Icon Name	Description
	<b>SHIFT LEFT</b>	Shift the screen left to view more options.
	<b>SHIFT RIGHT</b>	Shift the screen right to view more options.

**CardioTouch Symbols Used (continued)**

Icon	Icon Name	Description
	<b>KEYPAD</b>	Numeric keypad for entering data.
	<b>ENTER</b>	Select after entering information to enter value.
	<b>CLEAR</b>	Clear any values selected.
	<b>INFO</b>	Select to provide more information and details.
	<b>SCALE</b>	Displays current value and high/low range.
	<b>CYBEX LOGO</b>	Press and hold Cybex logo for 6 seconds to access <i>Screen Lock</i> and <i>Toolbox</i> . See Preventive Maintenance section.
	<b>LANGUAGE ICON</b>	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**

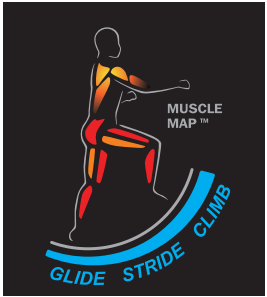
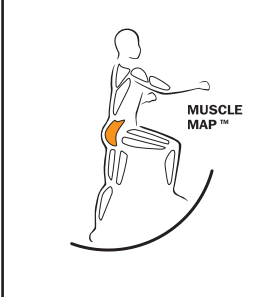
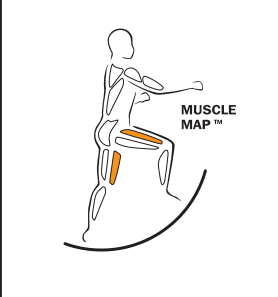
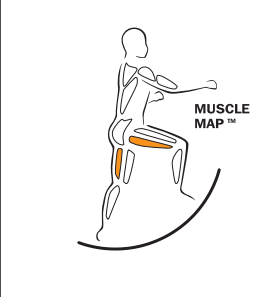
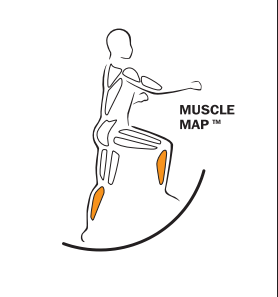


## Muscle Map and Incline Meter

**Muscle Map** – An anatomical representation of the human body with primary muscle groups lit by multi-color LED's. The color of the LED displays which muscle groups are targeted and the relative intensity of the exercise.

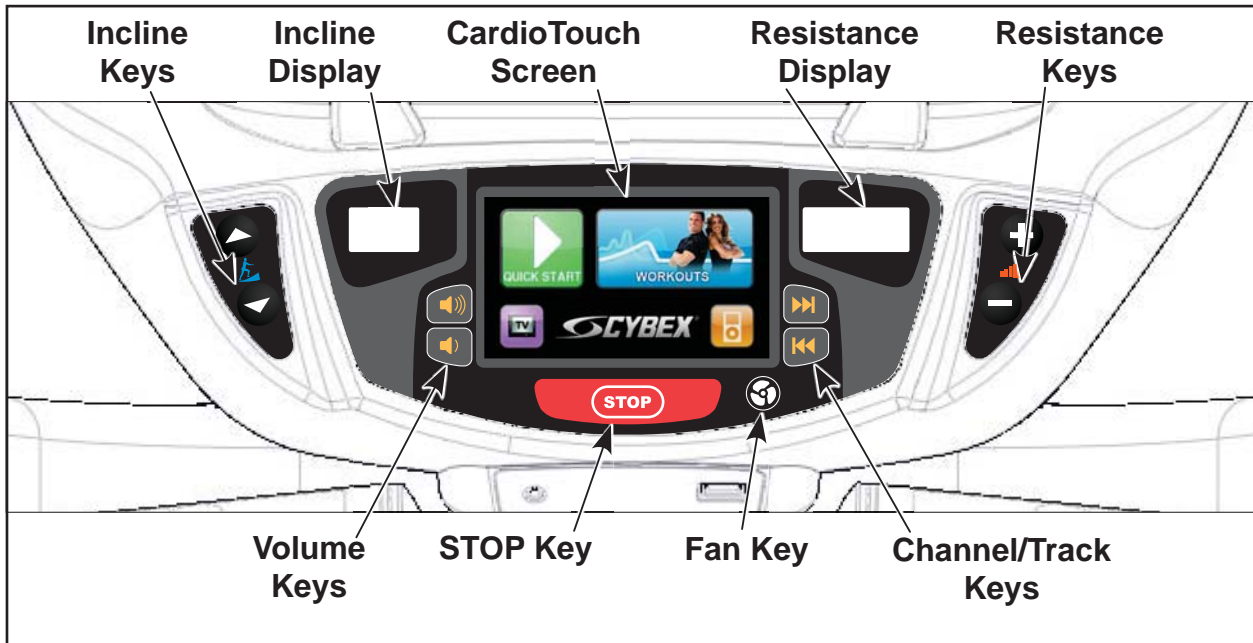
The LED colors display intensity level.

LED	Color	Level
	Yellow	Low
	Amber	Medium
	Red	High
	Blinking Red	Very high

Muscle Map and Incline Meter	Glute Muscle	Quadricep Muscle	Hamstring Muscle	Calf Muscle
				

**Incline Meter** – An LED meter displaying the incline setting. The meter increase or decreases as the incline changes.

## CardioTouch Screen and User Controls



**Displays** — Incline and Resistance are shown in the LED displays.

**Keys** — User controls for Incline, Resistance, Volume, STOP, Fan and Channel/Track.

**CardioTouch Screen** — Tap the icons to make selections.



## Mount and Dismount



**WARNING: Moving parts and fall hazard.**

*To avoid serious injury wait until foot plates come to a complete stop before getting off unit.*

1. Verify unit is off or in *Dormant Mode* and foot plates are completely stopped.
2. Grasp handrail and step carefully onto foot plates.

**To dismount unit safely:**

1. Wait until foot plates come to a complete stop.
2. Grasp handrails for support and carefully step off back of unit.

## Emergency Dismount

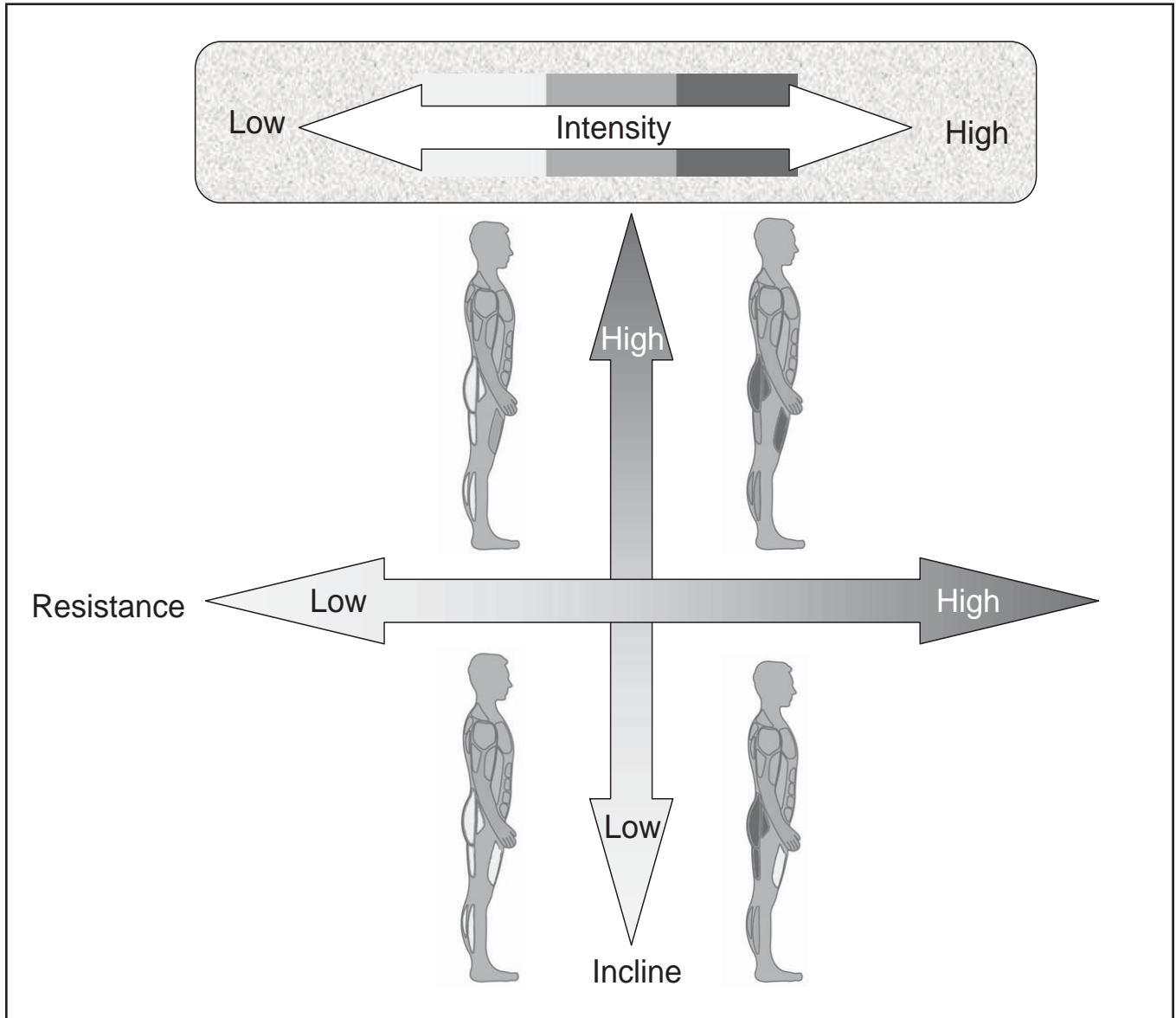
**If an emergency stop and dismount is required:**

1. Grasp handrails for support.
2. Stop striding.
3. Wait until foot plates come to a complete stop.
4. Continue to hold handrails while carefully stepping off unit.



## Range of Motion

The elevation is adjustable up or down in the shape of an arc. The lowest setting of 0 equates to an arc of 12 degrees, where the highest setting of 20 equates to an arc of 34.5 degrees. There is no difference in muscles used between different incline positions. Differences exist in the intensity of muscle activity.



## Quick Operation Guide

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

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

1. Verify foot plates are completely stopped.
2. Grasp handrail and step carefully onto foot plates. Begin striding.
3. Tap **QUICK START** on the CardioTouch screen. The CardioTouch screen will display "Starting" and enter *Active Mode*.



4. Begin striding.
5. Press the **Incline** ▲ ▼ keys to change the incline at any time. The left display will show incline.
6. Press the **Resistance** + – keys to change the resistance at any time. The right display will show the current resistance.
7. Press the **STOP** key at any time to pause.

## Detailed Operation Guide

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

1. Plug the optional power cord and E3 View Monitor power cord (E3 View Monitor units only) into a power outlet from a grounded circuit, See **Electrical Requirements**. Coil up the remainder of the power cord and place it out of the way. The control panel will light up and be in the Dormant Mode.
2. Verify foot plates are completely stopped.
3. Grasp handrail and step carefully onto foot plates. Begin striding.
4. 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*.

5. Press the **Start** key. The CardioTouch screen will display “Starting” and enter *Active Mode*.
6. Begin striding.
7. Observe the control panel. The top center *Bar Graph* display shows a graphical representation of the relative incline changes, and if in a workout, will show the relative intensity changes that are coming up. The *Data Readouts* will start showing the workout data such as Distance, Calories, Heart rate (if available), METs 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 METs 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 workout control will resume starting with the next segment. To increase or decrease overall intensity, adjust the speed and/or the workout level.

8. Press the **Incline** ▲ ▼ keys to change the incline at any time. The left display will show incline.
9. Press the **Resistance** + – keys to change the resistance at any time. The right display will show the current resistance.
10. Press the **STOP** key at any time to pause.

- If pause feature is enabled, pause icon  is shown. Press pause icon or **STOP** button once to enter pause mode.
- If pause feature is disabled, stop icon  is shown. Press stop icon or **STOP** button once to enter "Workout review". "Workout Review" is displayed and the incline returns to 6%.

When a workout is complete the unit begins a countdown, "3...2...1" and sounds a tone for each count. Workout Review is displayed for the preset time or until you press the **Home** key. The unit returns to *Dormant Mode* when using the optional AC adapter.

## Workout Selection

With the 771A/771AT and 772A/772AT you may choose from *Quick Start* or *Workouts*. Speed is never predetermined. Change speed by changing stride.

### Quick Start

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

### Workouts

For Men	For Women	Levels	Settings
<b>Weight Loss</b>			
Hill Climb	Hill Climb	10	Select time, level and weight.
Speed Bump	Speed Bump	10	Select time, level and weight.
<b>Strength</b>			
High Low	High Low	10	Select time, level and weight.
Bursts	Bursts	10	Select time, level and weight.
Interval	Interval	10	Select time, level and weight.
<b>Fitness</b>		<b>Shaping</b>	
Total Leg	Total Leg	10	Select time, level and weight.
Target: Hip	Glute Camp	10	Select time, level and weight.
<b>Cardio</b>			
Hill Interval	Hill Interval	10	Select time, level and weight.
Wave	Wave	10	Select time, level and weight.
Interval	Interval	10	Select time, level and weight.
Heart Rate Control	Heart Rate Control	N/A	Select time, age, target heart rate and weight.
<b>Power</b>			
Constant Power	Constant Power	10	Select time, level and weight.
Adaptive Power	Adaptive Power	10	Select time, level and weight.

See Appendix for Workout Overviews

## Data Readouts - LED display

As the user exercises, the unit keeps track of and displays the following data:

**BPM (Beats Per Minute)** – User's current heart rate. Heart rate will appear when a signal is introduced.

**Calories** – The total accumulated calories burned during workout.

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

**Distance** – The total accumulated distance during workout. Depending on the defaults chosen, this measurement will show in English (miles) or Metric (kilometers). The unit uses a fixed 24" (61 cm) stroke, giving a travel distance of 48" (122 cm) per revolution. Distance = Strides per Minute x 24" (61 cm) x Time

**SPM (Strides per Minute)** – The average number of strides per minute at current speed.





**MET (Metabolic Equivalent)** – Displayed only if no BPM signal is present. A MET is the metabolic equivalent of the energy expended by the human body at rest. Anything over one MET is considered exertion. MET are calculated by the display and updated every 1 – 1.2 seconds. MET = Cal/Hr X 2.2 / User Weight (in pounds).

**WATT** – Present workload energy exertion. The absolute meter-kilogram-second unit of power equal to the work done at the rate of one joule per second, equivalent to 1/746 horsepower.

## 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

## 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 to the right of the Data Readouts 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

### Fan Control

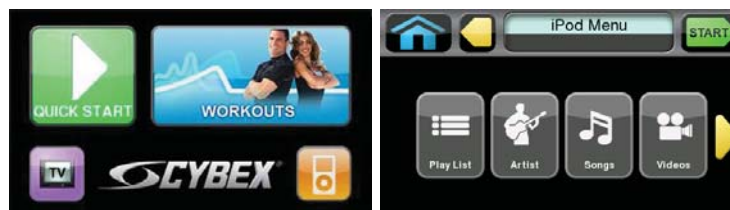
The fan defaults to the “OFF” setting. The user can change to “Fan Low”, “Fan High”, or “Fan Off” setting by pressing the appropriate control key.

### iPod Functions

**Connecting an iPod** — Connecting an iPod to the 771A/771AT and 772A/772AT 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 in the right side accessory tray.
2. Place iPod (not supplied) onto the right side accessory tray.

**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 music or videos are found.