

SECTION IIA

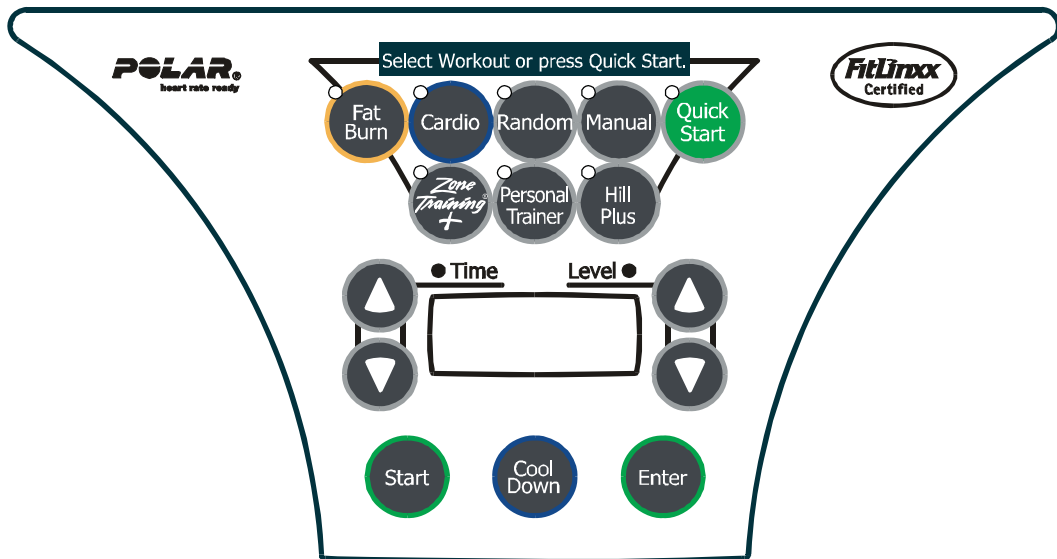
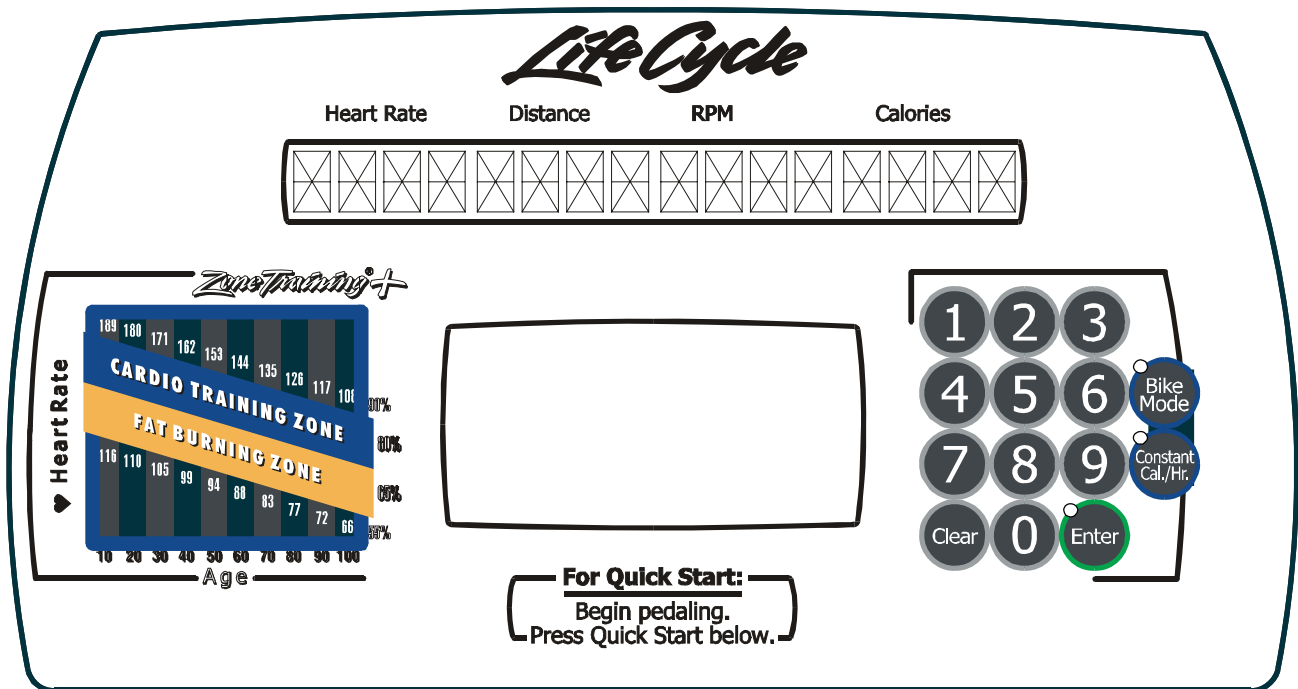
DIAGNOSTIC MODES FOR LED UNITS

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Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
DISPLAY CONSOLE LC9500

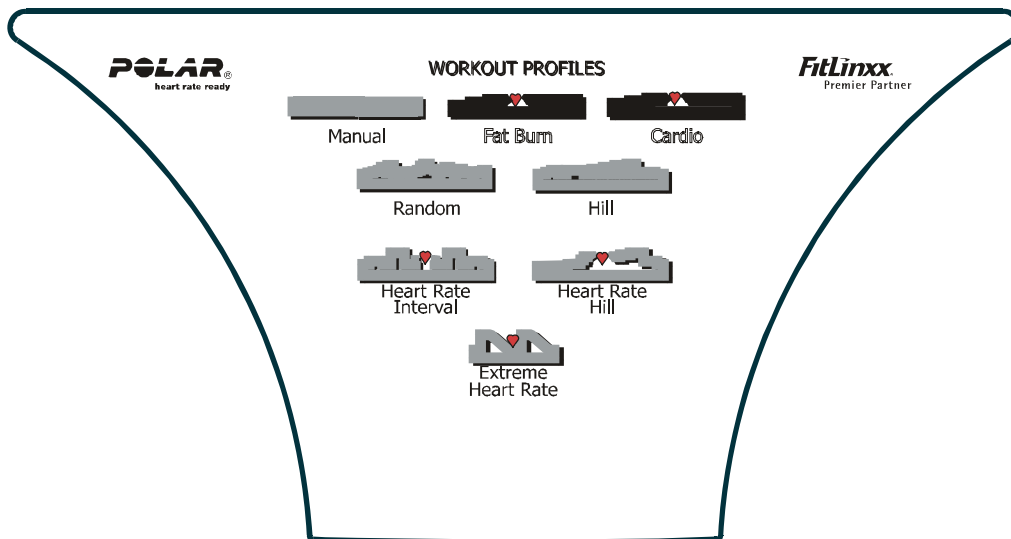
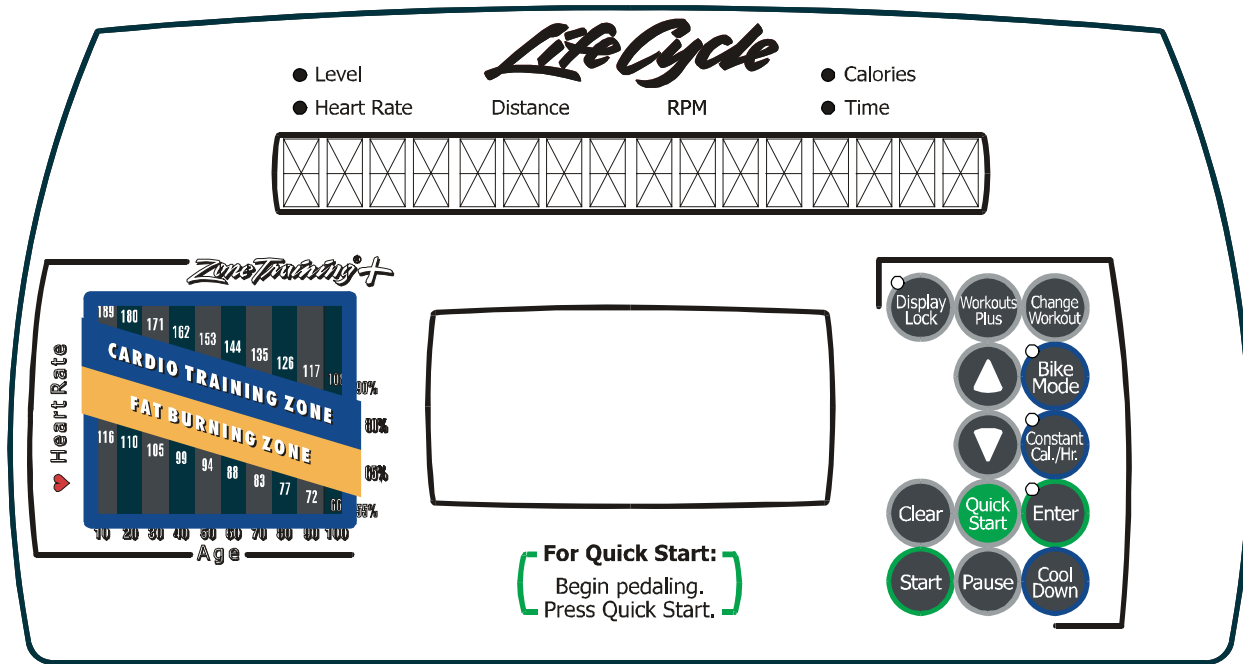
NOTES

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
DISPLAY CONSOLE LC9500**



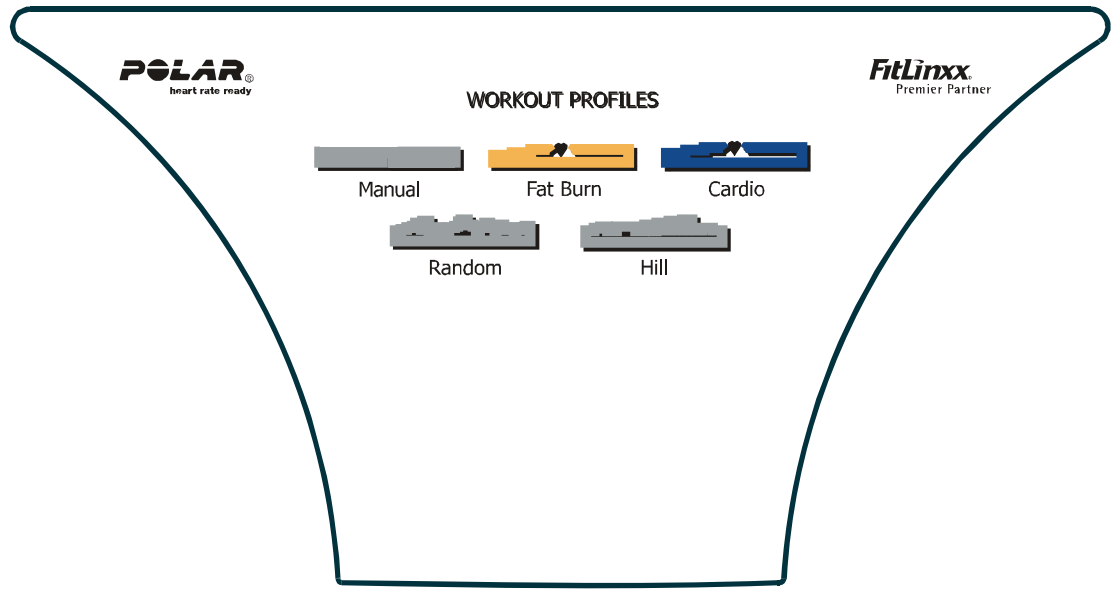
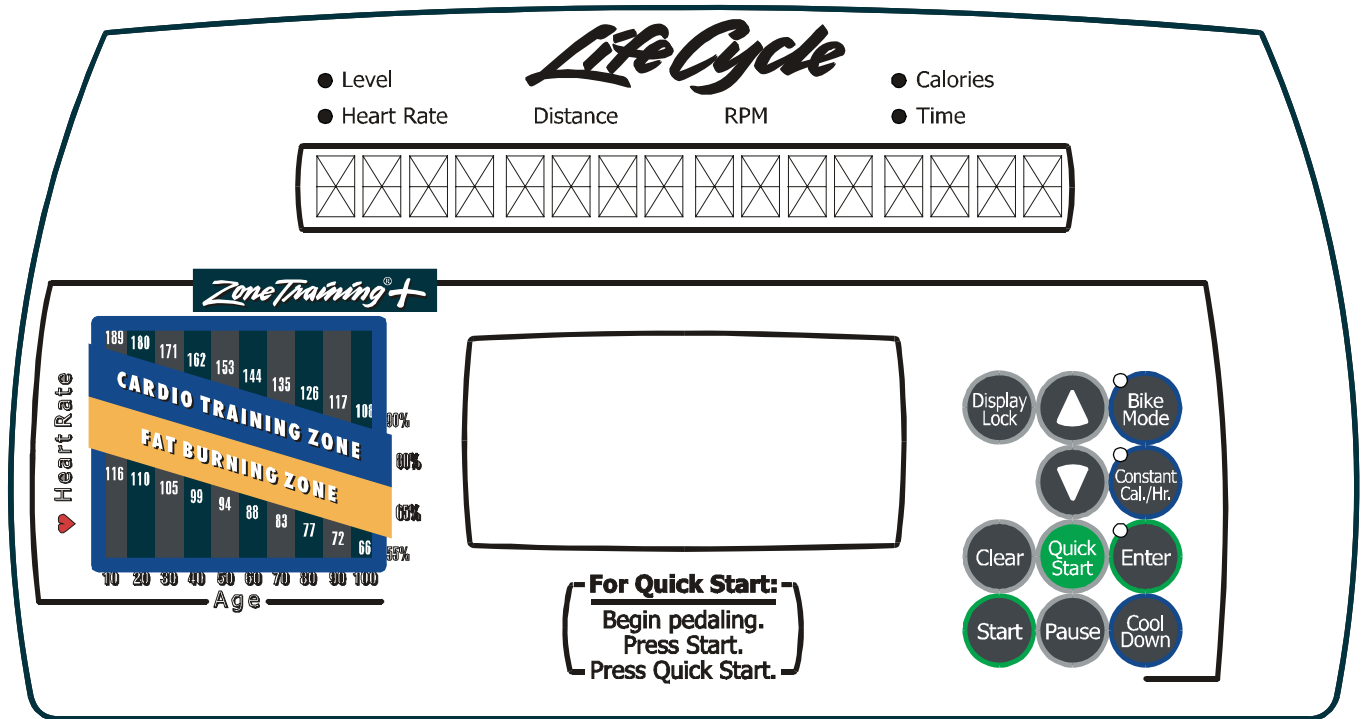
Lc9500

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
DISPLAY CONSOLE LC9100**



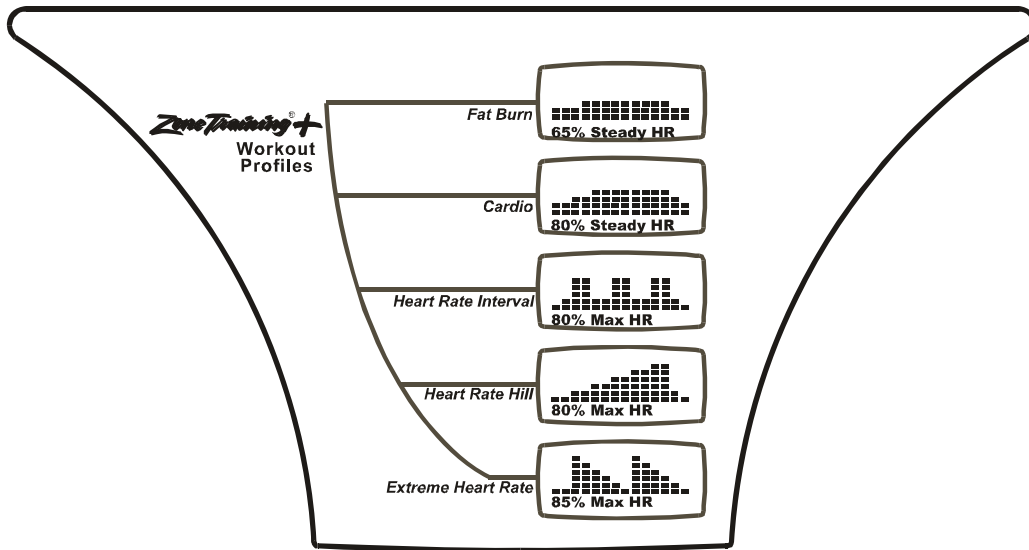
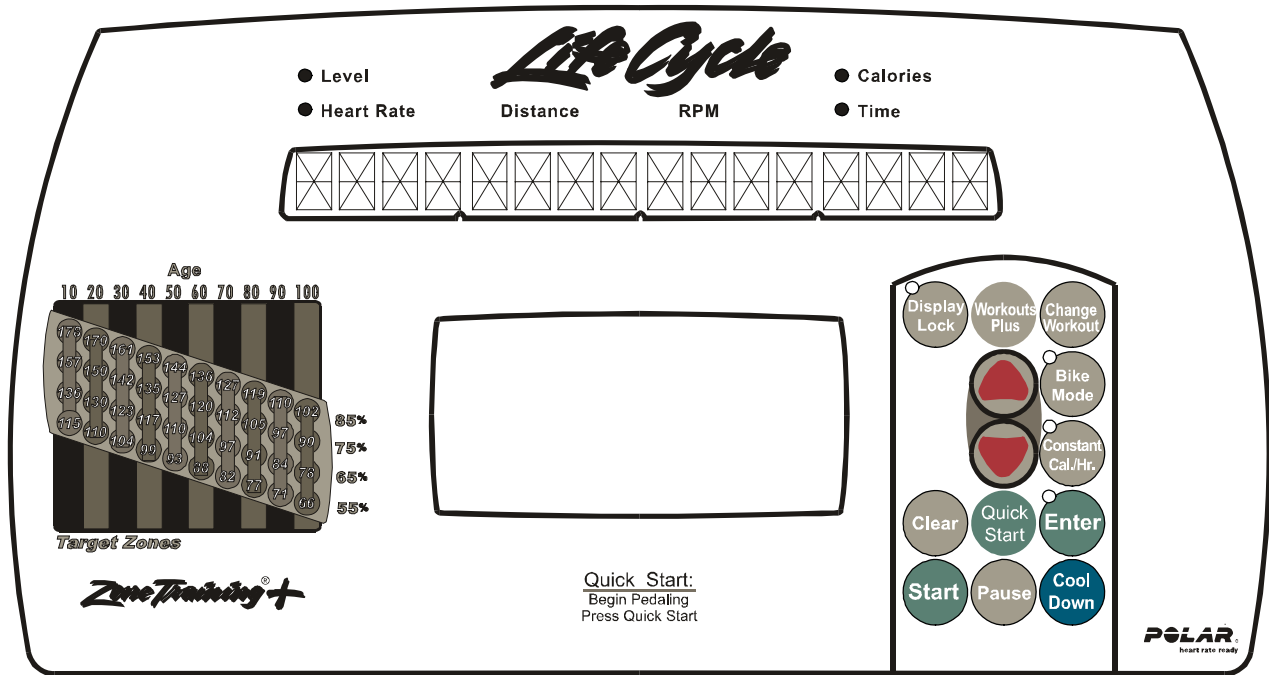
Lc9100

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
DISPLAY CONSOLE LC8500**



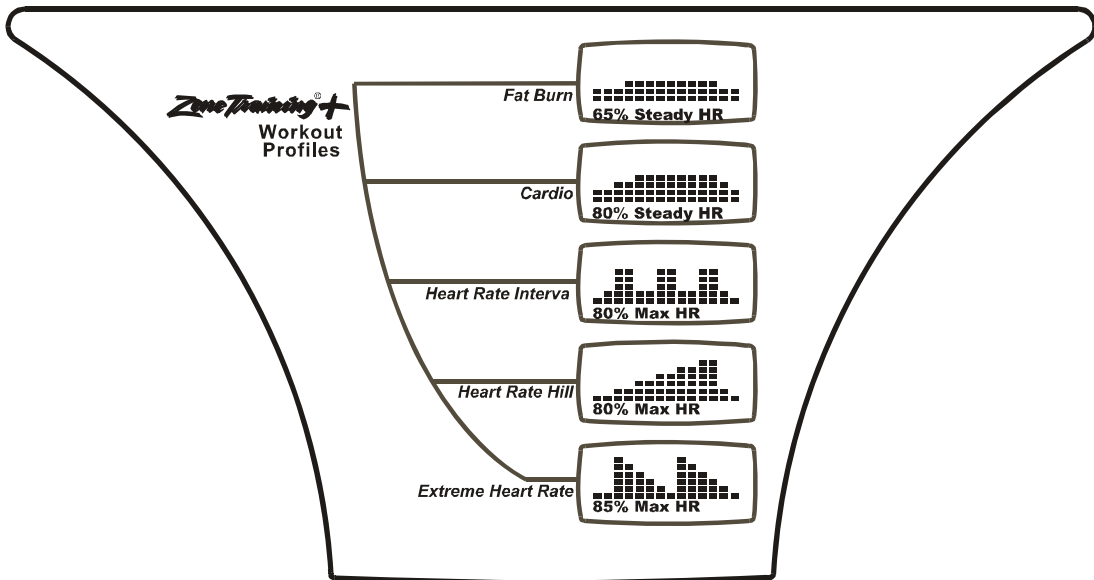
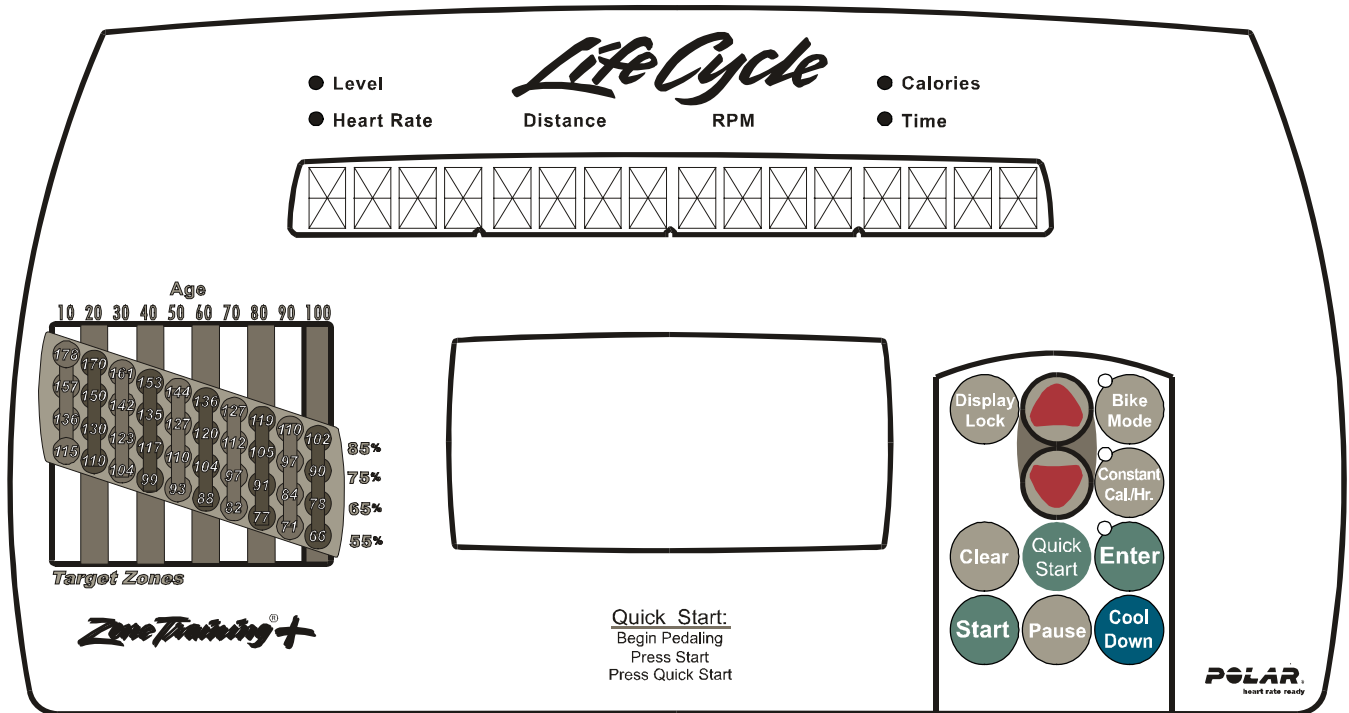
Lc8500

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
DISPLAY CONSOLE C9**



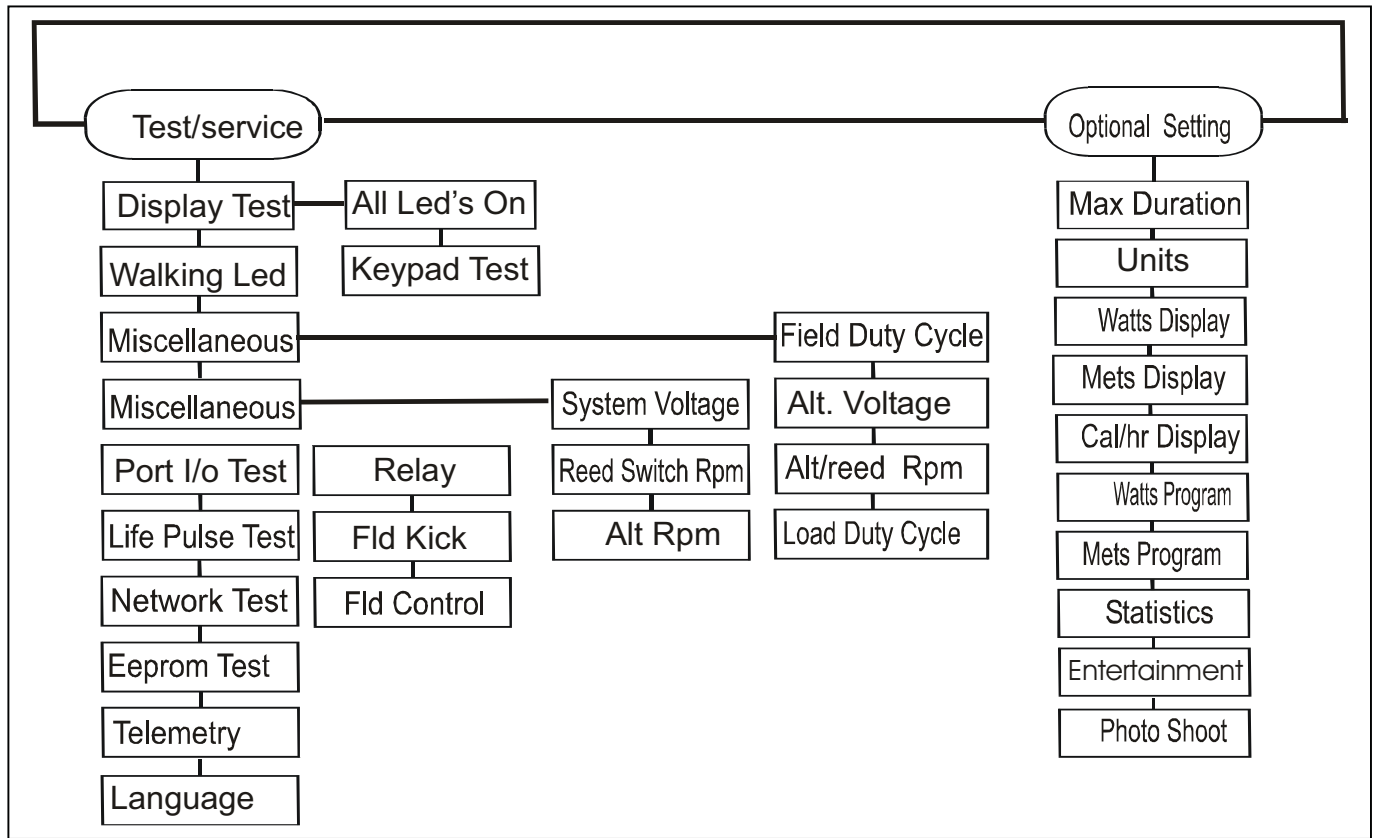
C9

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
DISPLAY CONSOLE C7**

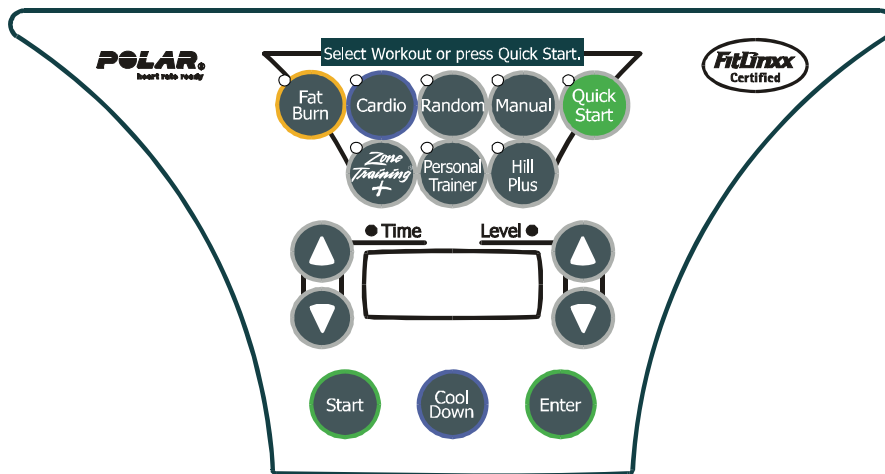
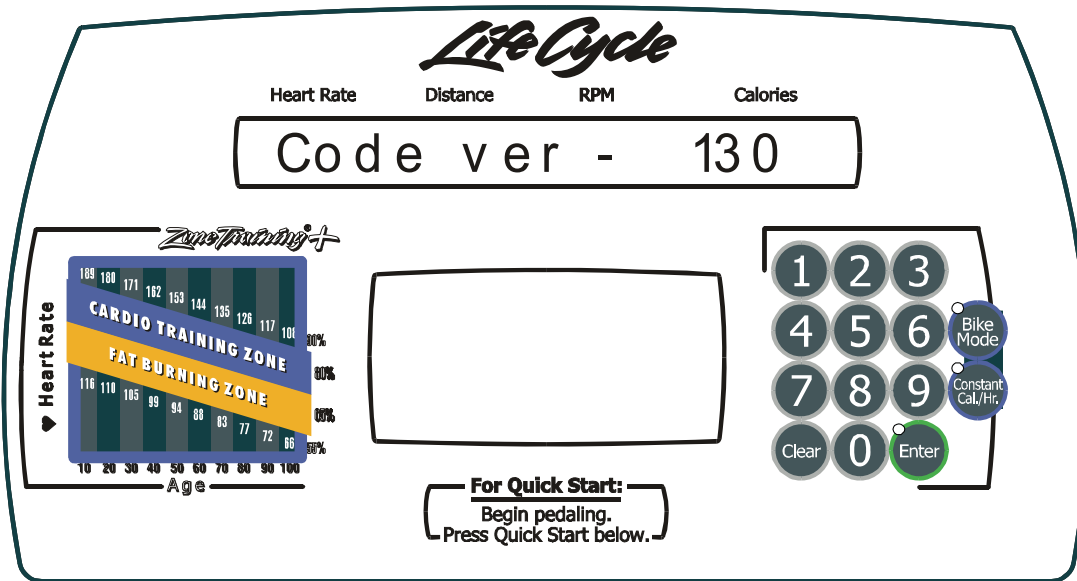


C7

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
MAP**



**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
ENTRY LEVEL**

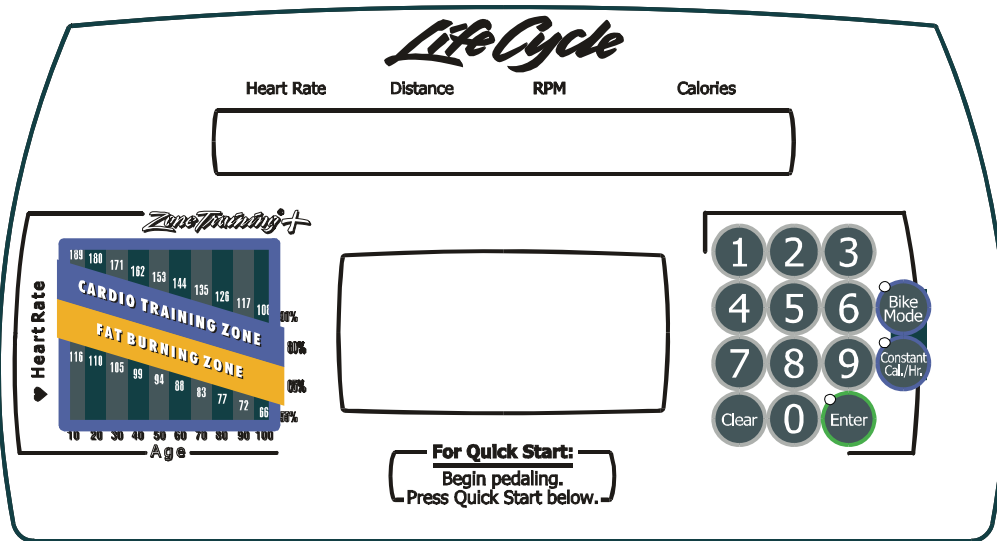


Hold down the number 5 key (9500) or the UP ARROW key on (non-9500 units), then the press the CLEAR key twice. Press the up ARROW key. The display menu will show after each press:

CODE VERSIONex: CODE VER - X.XX
 CSAFE VERSIONex: Csafe ver-- X.XX.XX
 PART NUMBERex: XXXX-- XXXXX--0000
 BOOT LOADER VERSION.....ex: BOOT VER -- X

Press ENTER for entry into the **OPTIONAL SETTINGS**.
 Press and hold COOL DOWN, and then press ENTER for entry into the **TEST/SERVICE MENU**.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE ALL LEDS AND KEYPAD TEST

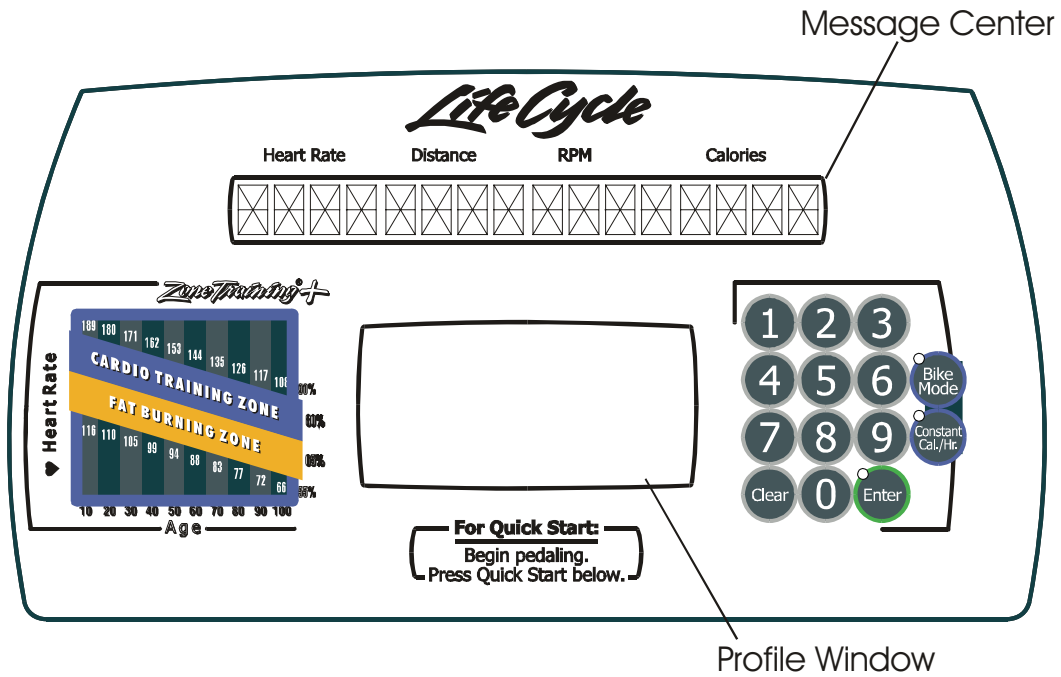


On entry to this state, all of the LEDs will turn ON. Pressing the keys will result in a beep sound for all but the START, ENTER and CLEAR keys, a character repeated across the message center will be displayed.

KEYS	DISPLAYED CHARACTER	KEYS	DISPLAYED CHARACTER
0	0	Display Lock	L
1	1	Workouts Plus	K
2	2	Change Workout	W
3	3	Up arrow	U
4	4	Down Arrow	D
5	5	Bike Mode	B
6	6	Constant Cal. / Hr.	A
7	7	Quick Start	Q
8	8	Start	S
9	9	Pause	P
TIME UP	U	Cool down	--
TIME DOWN	D		
LEVEL UP	▲		
LEVEL DOWN	▼		
BIKE MODE	B		
CONSTANT Cal./HR.	A		
FAT BURN	F		
CARDIO	C		
RANDOM	R		
MANUAL	M		
QUICK START	Q		
ZONE TRAINING	Z		
PERSONAL TRAINER	T		
HILL PLUS	H		
COOL DOWN	--		

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

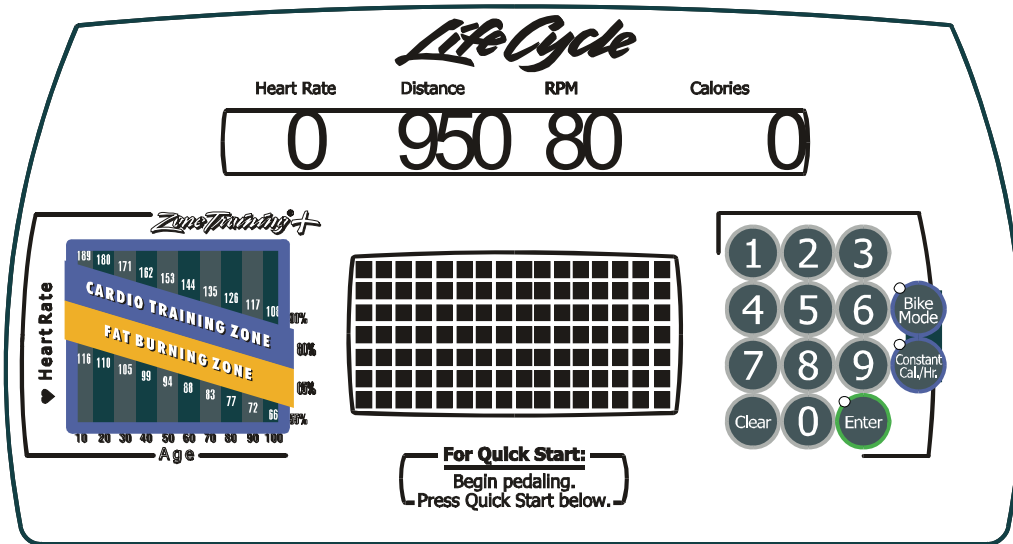
**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - WALKING LED TEST**



On entry to this state, the LED segments in the MESSAGE CENTER and the PROFILE WINDOW will give the animated effect of moving, henceforth, "Walking LED."

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - MISCELLANEOUS 1 TESTS**



FIELD DUTY CYCLE: In the Heart Rate Window, the Field Duty Cycle being applied to the alternator will be displayed (LC9500 and C9i only). This value ranges from 0-255.

ALTERNATOR OUTPUT: In the Distance Window, the alternator output voltage is displayed for LC9500, LC9100, and C9i.

RPM: In the RPM window, the present zone alternator RPM will be displayed.

CALORIES: In the Calories window, the present Load Duty Cycle being applied to the alternator will be displayed. Load duty cycle ranges from 0-320 for LC9500 model, 0-280 for LC9100 and C9i models, and 0-415 for LC8500 and C7i models. This value can be adjusted using the Time Up and Time Down arrow keys on the LC9500 console, and the UP and DOWN arrow keys on all other models.

BIKE MODE KEY: Press the Bike Mode key to toggle the speaker ON and OFF.

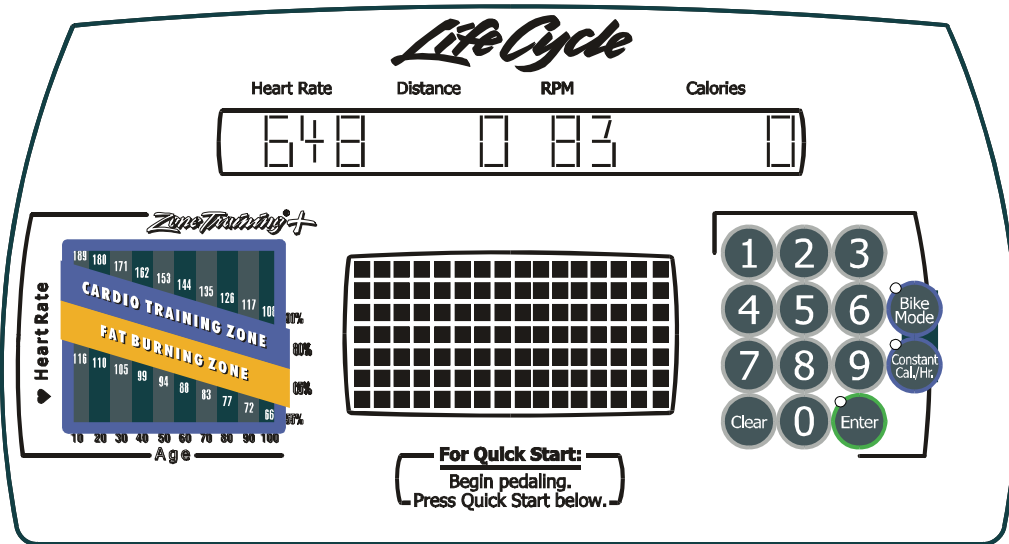
'0' KEY: Press the '0' key to toggle the RPM display between the alternator RPM and Reed Switch RPM. The Enter LED will be ON when alternator RPM is displayed. RPM from the reed switch will not display when the alternator is running.

'5' KEY: Press the '5' key (9500 only) to toggle the alternator ON and OFF.

ENTER KEY: Press the ENTER key to advance to the next diagnostic state.

CLEAR KEY: Press the CLEAR key to go back to a previous diagnostic state, or repeated pressing to exit diagnostics.

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - MISCELLANEOUS 2 TESTS**



REED SWITCH RPM: In the Distance Window, the Reed Switch RPM is displayed. Note: The Reed Switch RPM will not display when the alternator is running.

RPM: In the RPM window, the alternator RPM will be displayed.

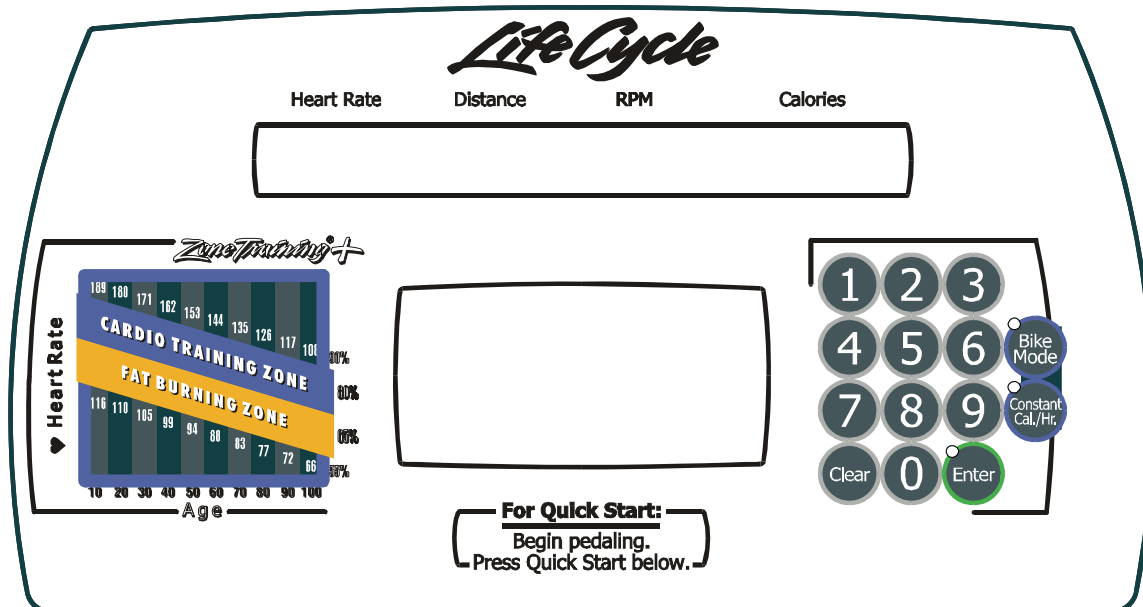
SYSTEM VOLTAGE (V_{sys}): In the Heart Rate Window, the present system voltage (V_{sys}) supplied to the console is displayed.

'5' KEY or DOWN ARROW KEY: Pressing the '5' key (9500) or the DOWN Arrow key (91/85/C9i/C7i) will display the value of V_{sys} at startup, before the alternator is turned ON. This is useful because you can get an indication of the battery voltage of the 6V battery. Note: This voltage will be slightly lower than if you read the voltage of the 6V battery directly from its terminals.

ENTER KEY: Press the ENTER key to advance to the next diagnostic state.

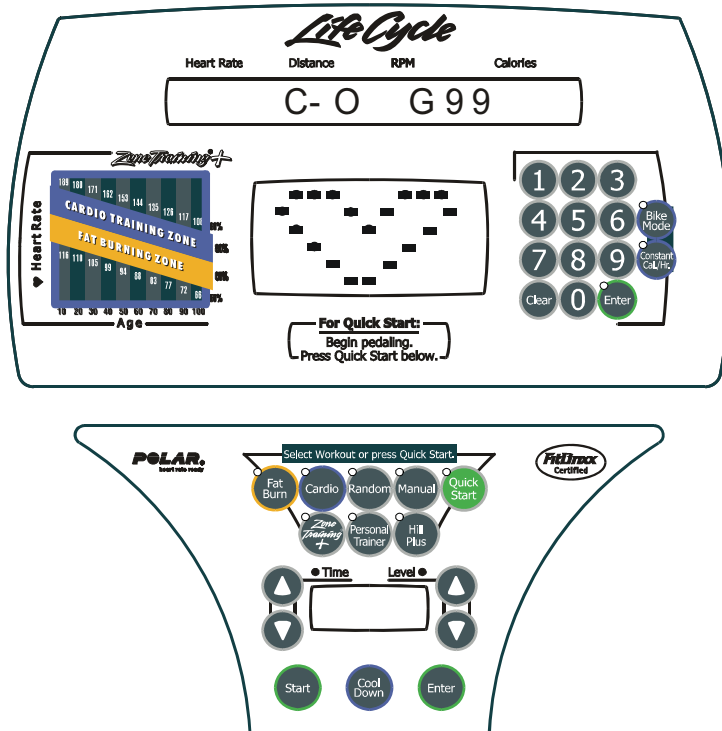
CLEAR KEY: Press the CLEAR key to go back to a previous diagnostic state, or repeated pressing to exit diagnostics.

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - PORT I/O TEST**



Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - LIFE PULSE TEST



Upon initial entry to this test, a heart-shaped image will be displayed in the profile window along with two messages in the message center when the user has both hands on the LifePulse sensors. The first message indicates the LifePulse software version number. The second is the configuration of the LifePulse communication system, which is either ON or OFF. This setting enables external communications for LifePulse development only and should be left OFF. Following these messages, the display will change to a mode to display diagnostic information as described below, and the LifePulse system will be ready to be manually tested.

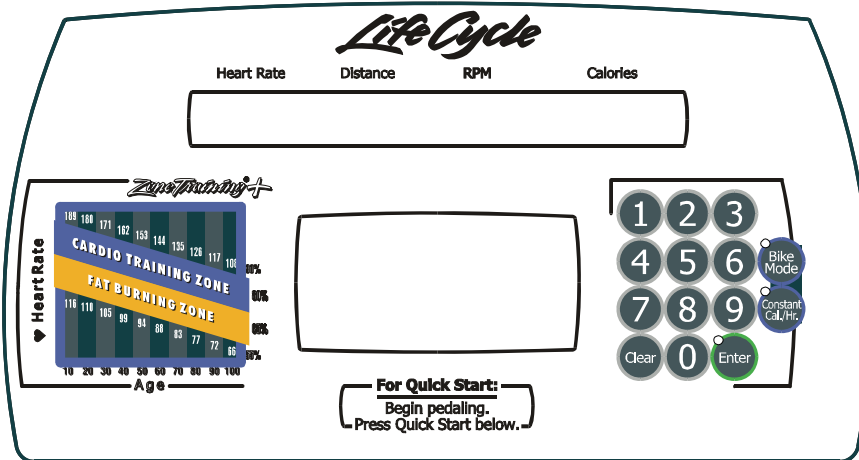
When both hands are detected on the sensors, the letters 'L' and 'R' will be displayed in the profile window along with the heart-shaped image.

Two timers will begin counting from the time both the left and right hands on condition occurs. The first timer, located on the upper console message center display, will stop counting when LifePulse computes and displays an initial peak detected heart rate reading. The second timer, located on the lower console display window, will continue counting until LifePulse can reliably display the users heart rate. These timer readings are used for reference only.

The gain value of the heart rate signal is shown following the 'G' in the message display window. The value ranges from 0 to 99. A gain value of 99 is considered to be high and undesirable. A gain value of 0 is considered to be low and also undesirable. Gain values of between 15 and 40 are considered normal depending upon whether the user is exercising or standing still during this test.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - CSAFE NETWORK TEST**



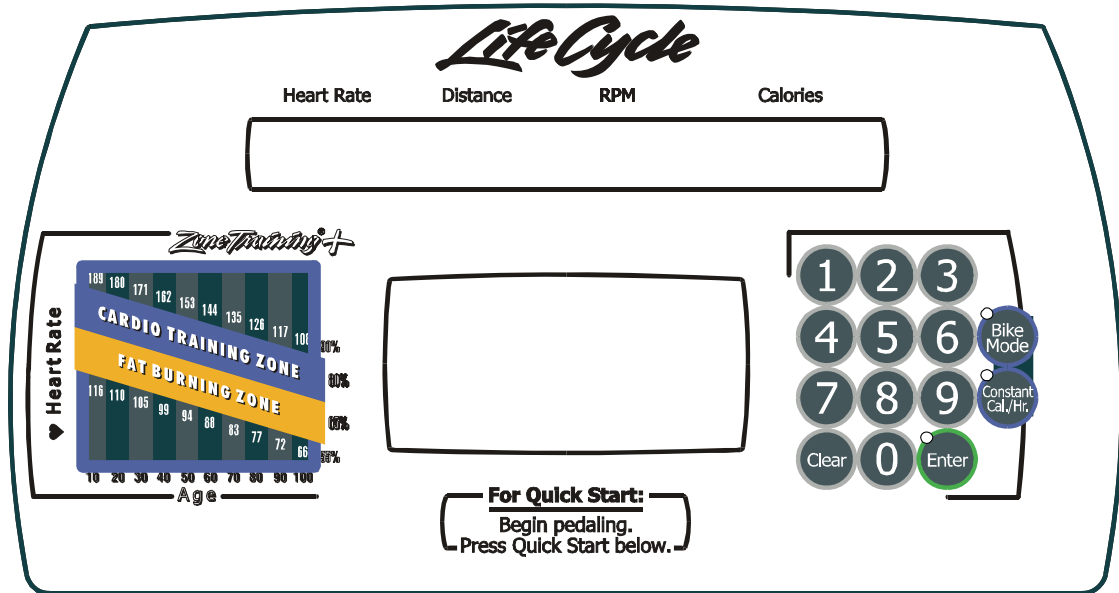
Within this state, the CSAFE network can be tested.

This is how you can check to see if you're receiving any communications from the network system.

1. Remain in the CSAFE Test Mode above (by not exiting out of it).
2. Make sure the network cable is plugged in.
3. Press the COOLDOWN key. This will reset the console and send out the standard power up message to the network. The console should display "RESETTING NETWORK". The power up message sent to the network is the same one the console sends every time it is turned on (or anytime it is used by a user on self-powered products).
4. If the network has received the CSAFE communication packet from the console and the network sends configuration communication packet to the console the console will display "RECEIVING..."
5. If the console has been properly configured by the network and is allowed to accept user ID's then the console would show "GETID MODE XX". The "GETID" message means were in the get ID mode. This is the mode the network must put the console in, before it will ask the user to enter in their ID's. If the console is not put in this mode then the console will not ask for ID's.
6. If the network does not respond to the console then the console will display a "NOT CONNECTED" message. This indicates there is a problem with the network cable or network itself. This means the console has not received any valid CSAFE communications from the network.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

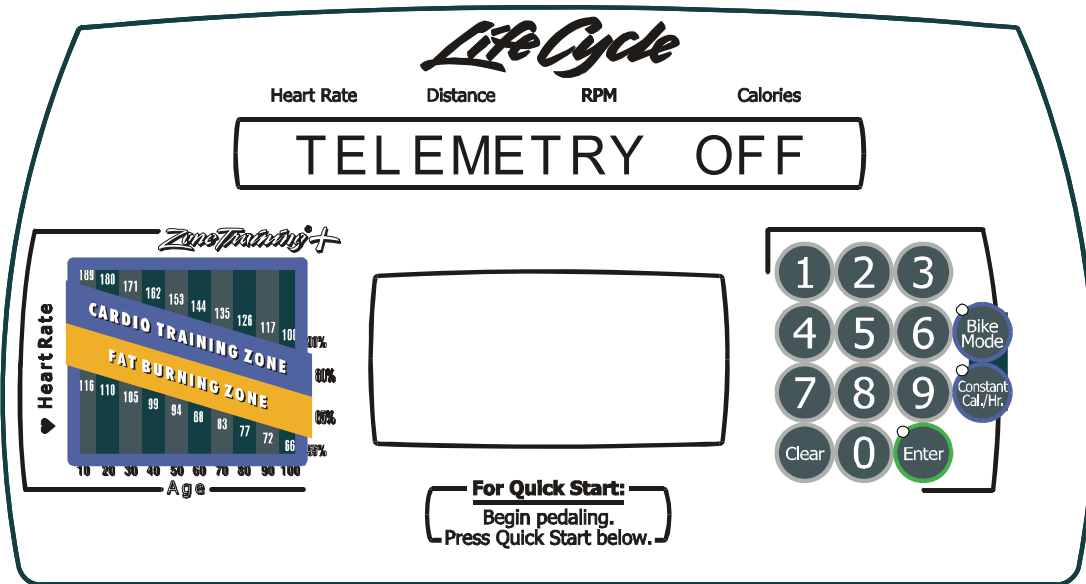
**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - EEPROM TEST**



This diagnostic state tests the Display Console EEPROM by reading, writing, and replacing all used locations in the Display Console EEPROM. The EEPROM location being tested will appear in the display message center. Pressing the DOWN ARROW will initiate the EEPROM test. If the test completes successfully, the message EEPROM GOOD will appear. If the test fails, the message EEPROM BAD AT XX will display with the bad EEPROM location.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - TELEMETRY ENABLE/DISABLE**



Within this state, the TELEMETRY can be turned ON or OFF. If a telemetry heart rate is detected, it will be displayed when telemetry is set to ON.

By default, the lifecycles will have TELEMETRY ON except for C9I has telemetry OFF.

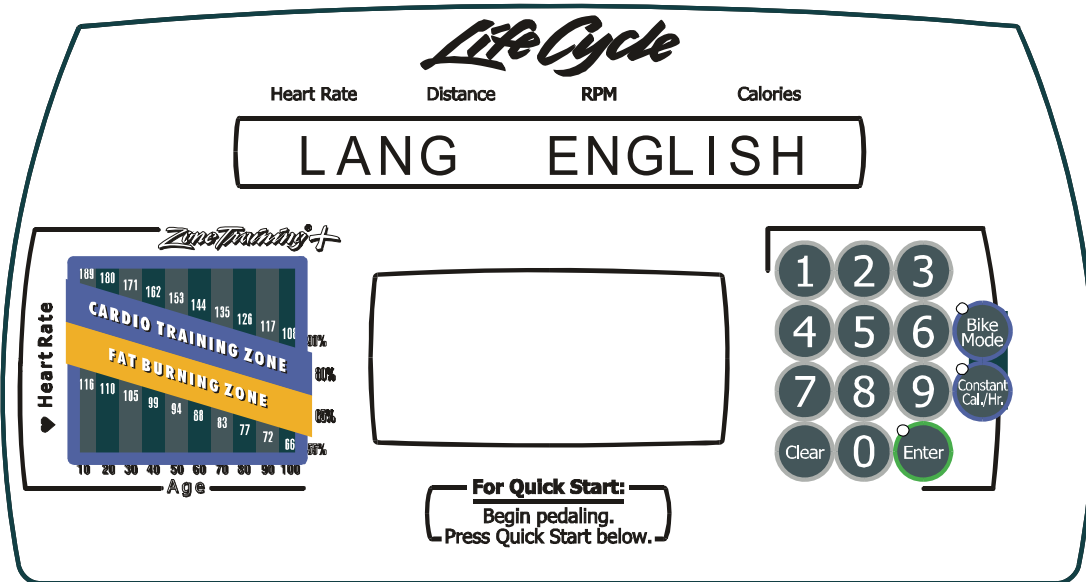
The DOWN ARROW will turn OFF the telemetry.

The UP ARROW will turn ON the telemetry and display a heart shape in the program profile window.

The ENTER key LED indicates when the value is at the default setting of TELEMETRY ON. This value is stored in EEPROM and is kept when the unit is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

**Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
TEST/SERVICE - LANGUAGE**



Within this state, one of seven languages can be selected to include: English, German, French, Italian, Dutch, Spanish or Portuguese.

The UP ARROW, when pressed, displays the next language in the list.

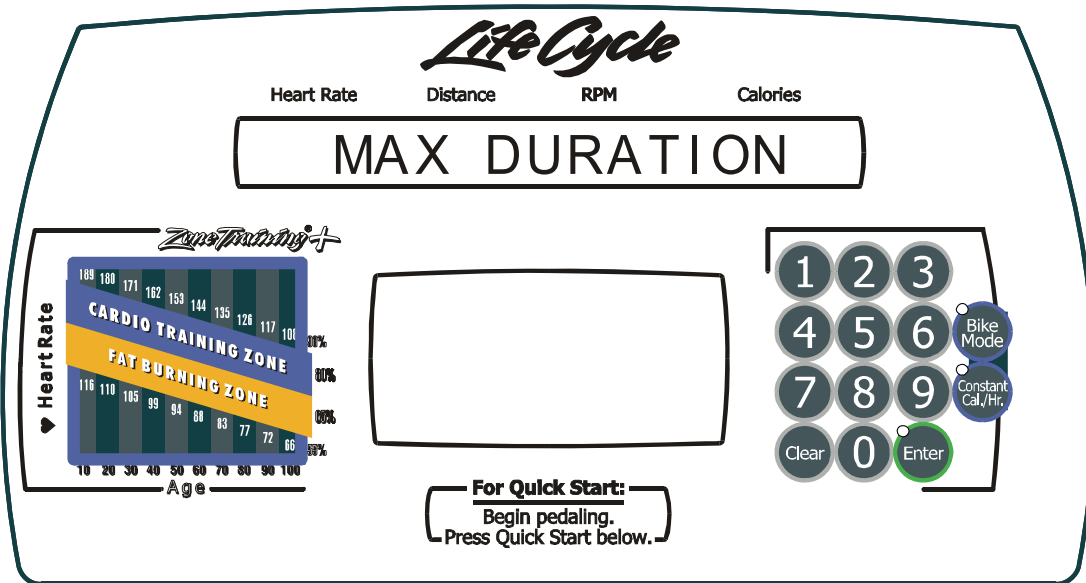
The DOWN ARROW, when pressed, displays the previous language in the list.

The ENTER key LED indicates when the language is set to the default of ENGLISH.

This value is stored EEPROM and is kept when the unit is not in use.

Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - MAX PROGRAM DURATION



Within this state, the MAXIMUM PROGRAM DURATION is displayed and can be adjusted from a range of 1-99 minutes on the LC9100, LC8500, C9i, and C7i. LC9500 can be adjusted from 10-99 minutes.

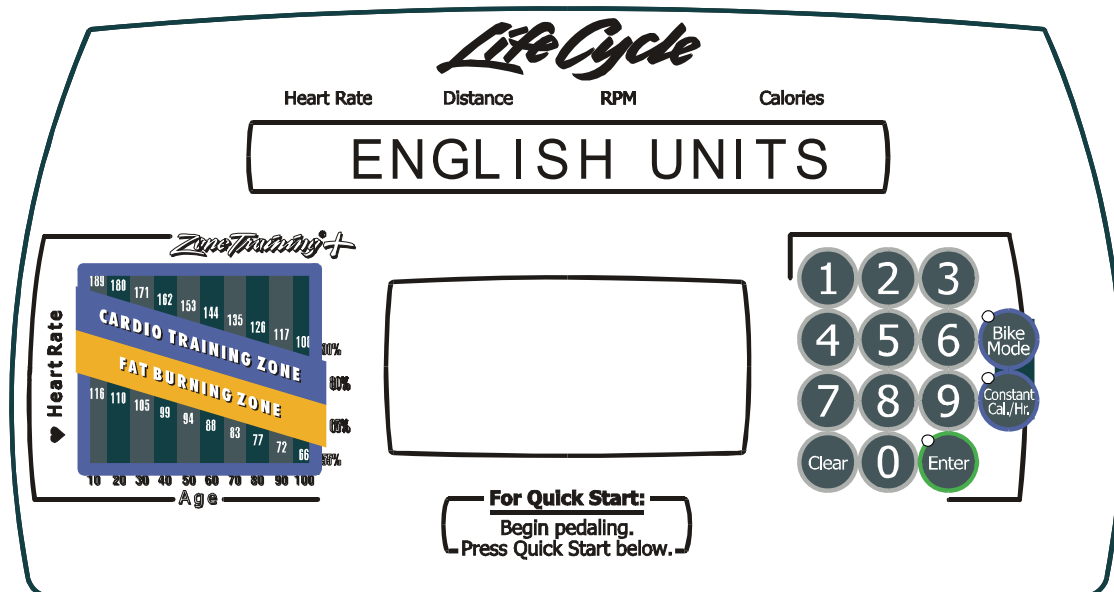
The DOWN ARROW will decrease the value by 1 minute. Key will Auto-Repeat if held.

The UP ARROW will increase the value by 1 minute. Key will Auto-Repeat if held.

The ENTER key LED indicates when the value is at the default of 60 minutes. This value is stored in EEPROM and is kept when the unit is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - ENGLISH/METRIC UNITS



Within this state, ENGLISH or METRIC units can be selected.

The DOWN ARROW will select METRIC units.

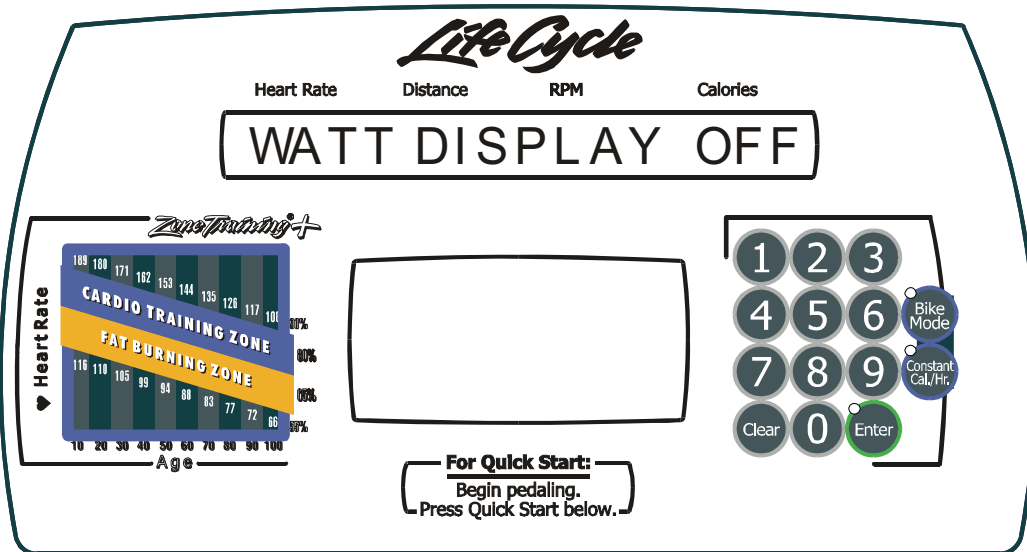
The UP ARROW will select ENGLISH units.

The ENTER key LED indicates when the value is at the default setting of ENGLISH UNITS.

This value is stored in EEPROM and is kept when the unit is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - WATTS DISPLAY ENABLE/DISABLE



If this option is enabled, the MESSAGE CENTER displays the Watts equivalent of the workload. This message will only be displayed after a level change.

The DOWN ARROW will turn OFF the WATTS PROGRAM.

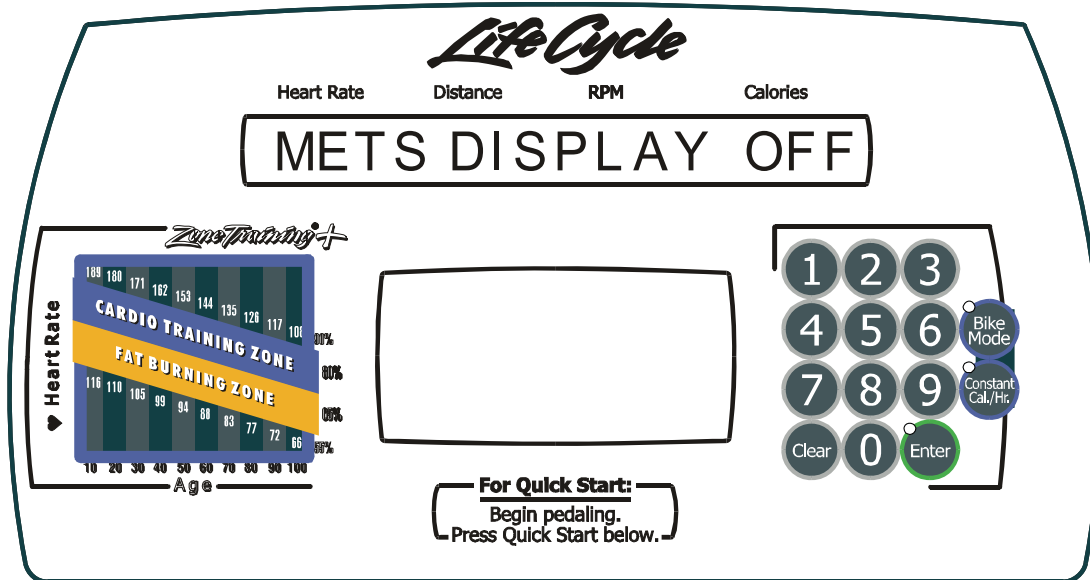
The UP ARROW will turn ON the WATTS PROGRAM.

The ENTER key LED indicates when the value is at the default setting of WATTS PROGRAM ON.

The value is stored in EEPROM and is kept when the bike is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - METS DISPLAY ENABLE/DISABLE



If this option is enabled, the MESSAGE CENTER displays the METs equivalent of the workload. This message will only be displayed after a level change.

The DOWN ARROW will turn OFF the METS PROGRAM.

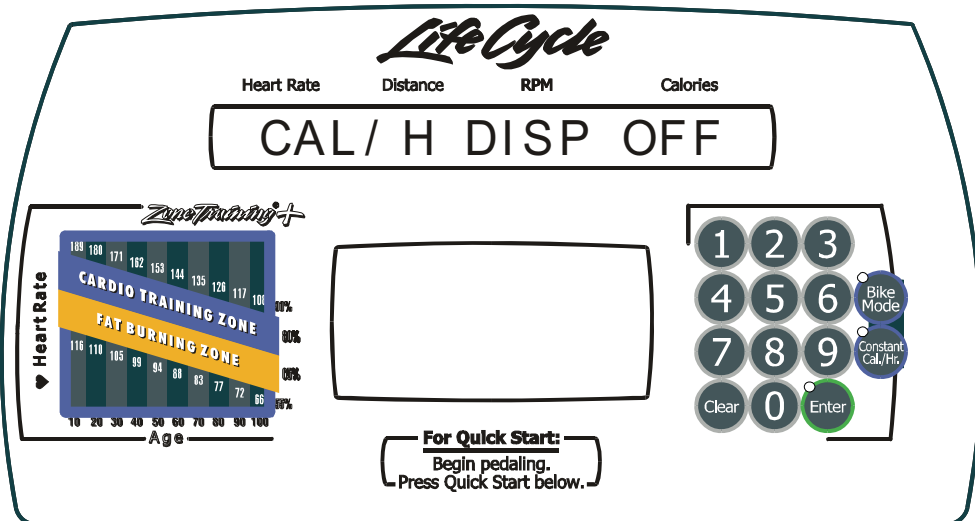
The UP ARROW will turn ON the METS PROGRAM.

The ENTER key LED indicates when the value is at the default setting of METS PROGRAM ON.

The value is stored in EEPROM and is kept when the bike is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C OPTIONAL SETTINGS - CAL/HR DISPLAY ENABLE/DISABLE



If this option is enabled, the MESSAGE CENTER displays the Calories/Hour equivalent of the workload. This message will only be displayed after a level change.

The DOWN ARROW will turn OFF the CAL/H program.

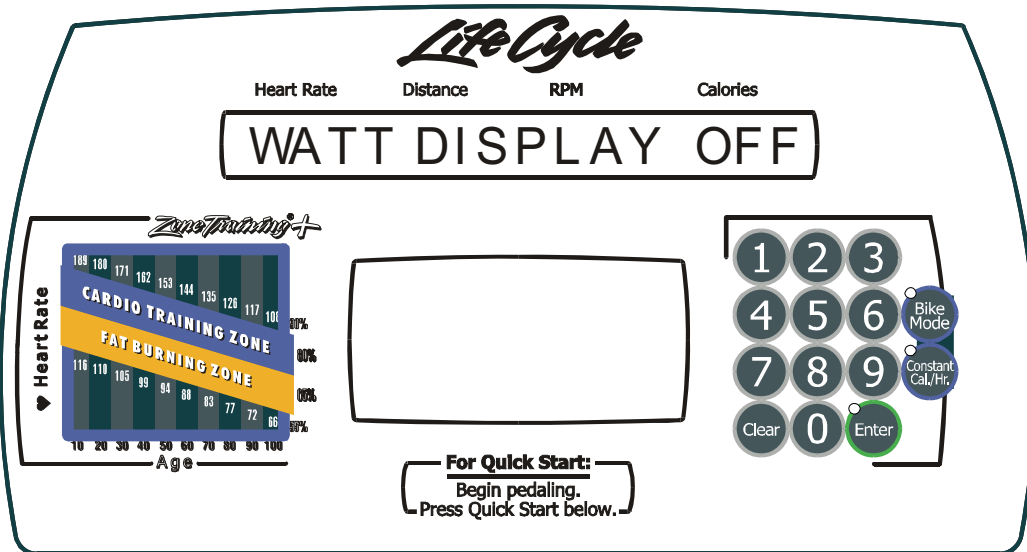
The UP ARROW will turn ON the CAL/H program.

The ENTER key LED indicates when the value is at the default setting of CAL/H PROGRAM ON.

The value is stored in EEPROM and is kept when the bike is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - WATTS PROGRAM ENABLE/DISABLE



If this option is enabled, the MESSAGE CENTER displays the Watts equivalent of the workload. This message will only be displayed after a level change.

The DOWN ARROW will turn OFF the WATTS PROGRAM.

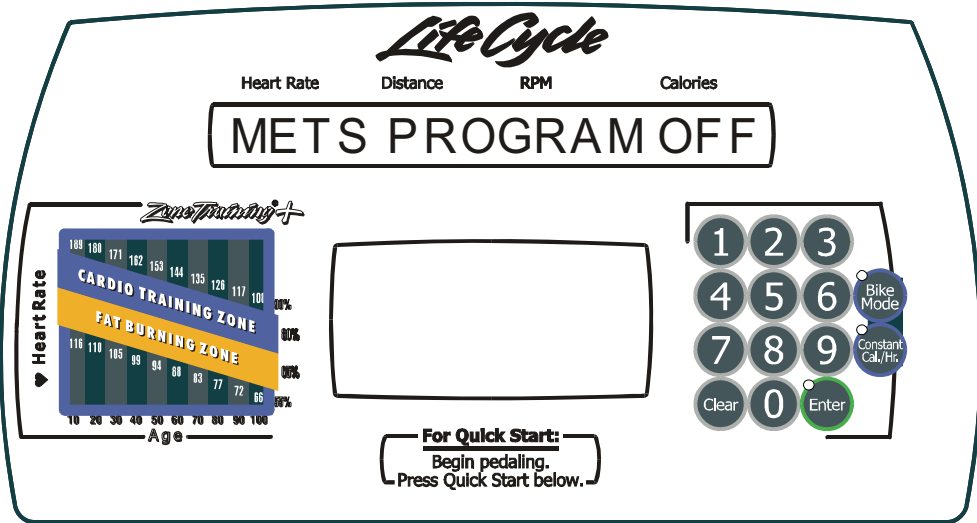
The UP ARROW will turn ON the WATTS PROGRAM.

The ENTER key LED indicates when the value is at the default setting of WATTS PROGRAM ON.

The value is stored in EEPROM and is kept when the bike is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - METS PROGRAM ENABLE/DISABLE



Within this state, METS PROGRAM can be turned ON or OFF.

By default, the LifeCycle will have the METS PROGRAM OFF.

The DOWN ARROW will turn OFF the METS PROGRAM.

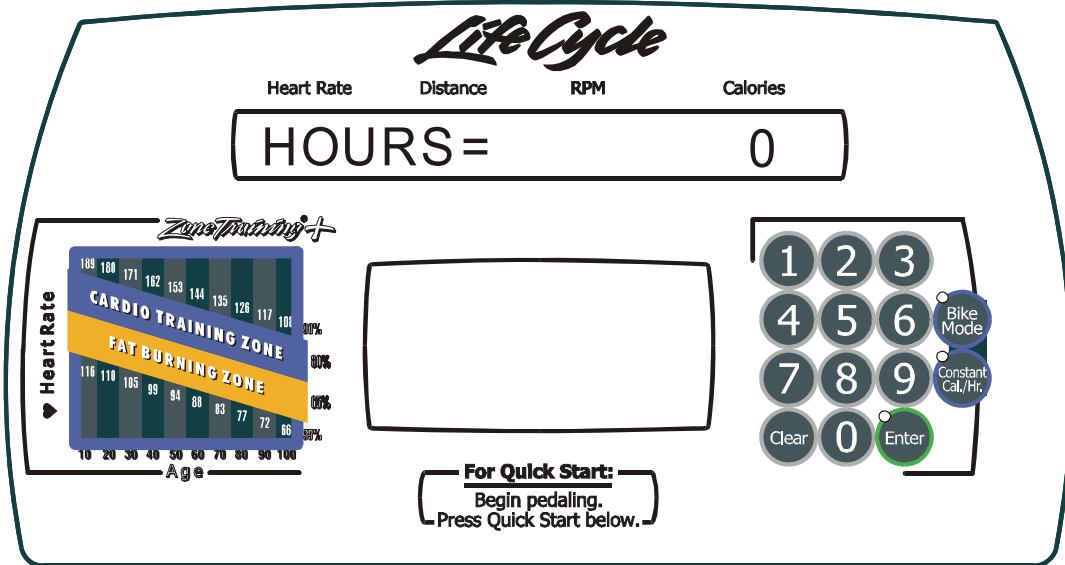
The UP ARROW will turn ON the METS PROGRAM.

The ENTER key LED indicates when the value is at the default of METS PROGRAM ON.

This value is stored in EEPROM and is kept when the bike is not in use.

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - TOTAL HOURS AND STATISTICS



Upon entry to this state, TOTAL HOURS are displayed.

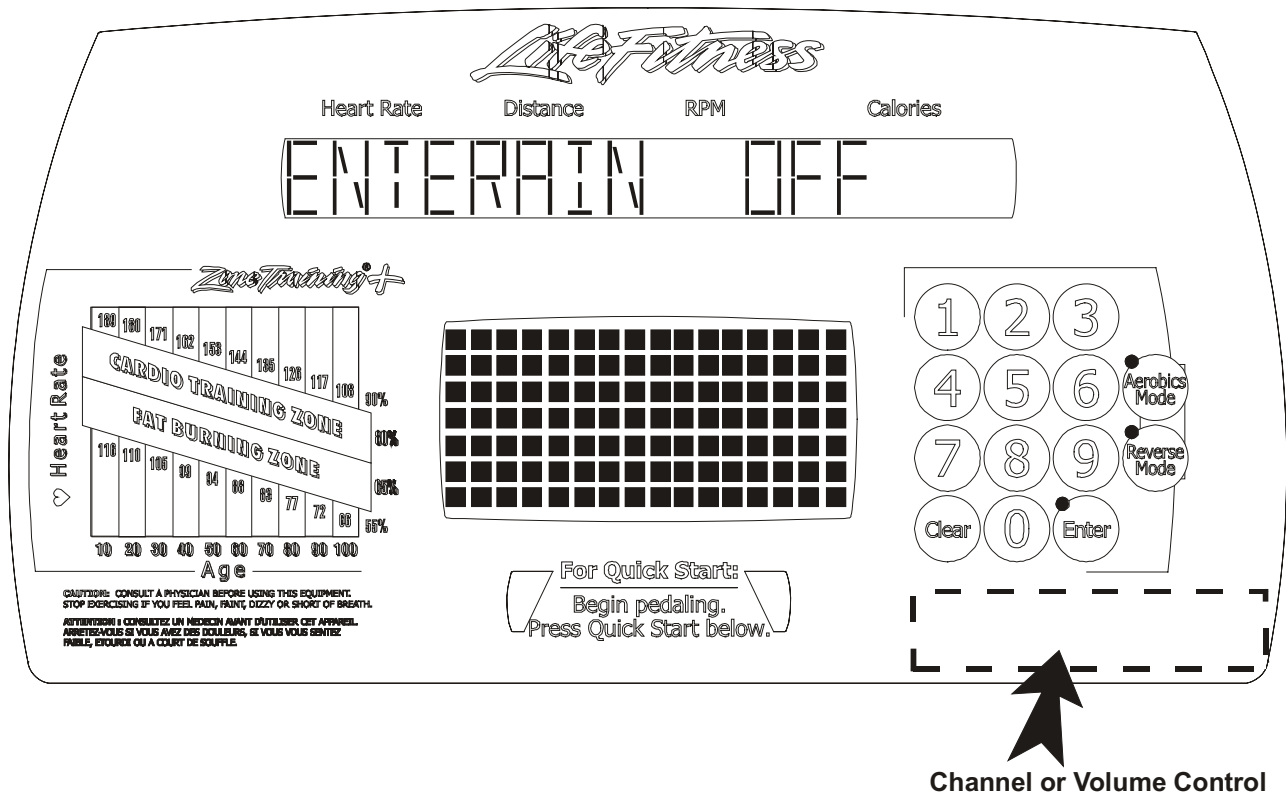
STATISTICS can be displayed using the UP and DOWN arrow keys. The UP ARROW allows scrolling through the available programs and shows the number of times each program has been selected. The DOWN ARROW backs up through the list of available programs and back to the total hours displayed.

The Programs are:

- HOUR = Total hours on the console
- DIST = Total distance in miles on the console
- HILL
- RANDOM
- MANUAL
- FAT
- CARDIO
- AEROBICS
- X-REV
- WATTS
- METS
- QUICK
- HEART HILL
- HEART INT
- HEART EXT
- PRE SET
- CUSTOM

Press the ENTER key to advance to the next diagnostic state. Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - ENTERTAINMENT CONTROLS
ON/OFF (LC9500 ONLY)

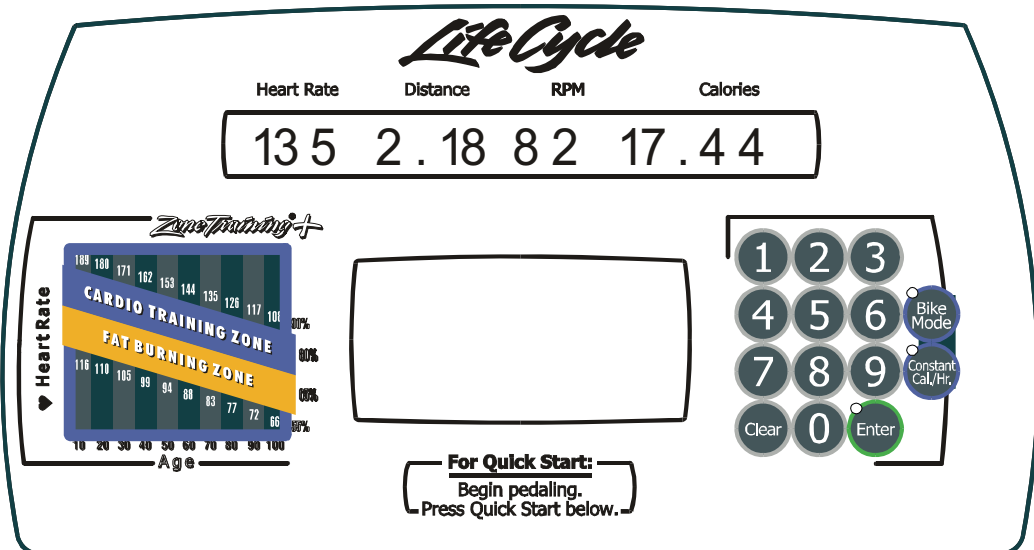


The ENTERTAINMENT CONTROL SETTING

Using the arrow keys will turn ON or OFF the entertainment (cardio theater/broadcast vision) controls for the CSAFE PORT output for volume and channel change. Off is the default setting.

Note: The Channel or Volume Control is supplied by Cardio Theater or Broadcast Theater. These controls can be found as indicated by the dashed-box.

Lifecycle Upright Bikes LC95, LC91, LC85, C9, C7, 95Ce, 95Ci, 93Ci, and 90C
OPTIONAL SETTINGS - PHOTO SHOOT



Data displayed in the message center is non-functional and intended only to simulate values for photographic sessions.

Press the CLEAR key to the previous diagnostic state, or repeated pressing to exit diagnostics.