

Cardio Console Codes

Notes:

- On non-TMs, pressing [^] [1st #] [ENTER] displays what group of codes is being accessed. On TM consoles use [+] [1st #] [ENTER] or [+] instead of [^]. Below examples use [^].
- Pressing [SELECT] or [^] at that point allows you to view all possible selections, once in this mode pressing [down arrow] backs up through the selections, pressing [ENTER] then selects that item. If another test level is available at this point the [SELECT] / [ENTER] process is repeated.
- Pressing [^] [1st #] [2nd #] [(or 3rd #)] [ENTER] selects that item directly.
- Pressing [CLEAR] exits any of the special access modes.

Custom Defaults

[^] [2] [0] change default weight
 [^] [2] [1] change default level
 [^] [2] [2] change default workout time
 [^] [2] [3] change default age
 [^] [2] [4] change default % of Target Heart Rate for CHR
 [^] [2] [5] change default Treadmill initial speed
 [^] [2] [6] change default CrossRobics plate load
 [^] [2] [7-9] - spare -

to Scan:

[LEVEL: ^] [2] [ENTER]	" DEFAULTS "	[SELECT]	"ENTER WT(units)XXX"
0		[SELECT]	"LEVEL XX"
1		[SELECT]	"ENTER TIME XX"
2		[SELECT]	"CHR PERCENT XX"
3		[SELECT]	"ENTER AGE XX"
4		[SELECT]	"SPEED (units) XX.X"
5		[SELECT]	"ENTER PLATE XX"
6			

or directly:

[LEVEL: ^] [2] [0]	"ENTER WT-LB or KG XXX"	use keypad to change then [ENTER]
[LEVEL: ^] [2] [1]	"LEVEL XX"	use keypad to change then [ENTER]
[LEVEL: ^] [2] [2]	"ENTER TIME XX"	use keypad to change then [ENTER]
[LEVEL: ^] [2] [3]	"CHR PERCENT XX"	use keypad to change then [ENTER]
[LEVEL: ^] [2] [4]	"ENTER AGE XX"	use keypad to change then [ENTER]
[LEVEL: ^] [2] [5]	"SPEED MPH or KMH XX.X"	use keypad to change then [ENTER]
[LEVEL: ^] [2] [6]	"ENTER PLATE XX"	use keypad to change then [ENTER]

descriptions:

ENTER WT(units) XXX	Adjust the default weight (in current units) used in the workouts.
LEVEL XX	Adjust the default Level used in the non-Manual/Quick Start workouts.
ENTER TIME XX	Adjust the default time (in minutes) used in the workouts
CHR PERCENT XX	Constant HR modes, sets the % of max Heart Rate used for the Target HR
ENTER AGE XX	Adjust the default age used to calculate the Target HR in Constant HR modes and used to establish Fit Test performance.
SPEED (units) XX.X	(TM only)Adjust the default Speed (in current units) used in the non Manual/Constant HR / Speed Interval workouts.
ENTER PLATE XX	(CrossRobic only) Adjust the default plate loading assumed in the workouts.

Customize

[^][3][0]	change workout time limit
[^][3][1]	change units (MPH or KMH)
[^][3][2]	choose type of heart rate input and priority (telemetry or hand)
[^][3][3]	- spare -
[^][3][4]	choose console language
[^][3][5]	change contrast
[^][3][6]	change speed limit(treadmill) or step rate(stepmill)
[^][3][7]	change Clinical Mode(bike)
[^][3][8]	enable Magnetic key use
[^][3][9]	reset to factory defaults

to Scan:

[LEVEL: ^][3][ENTER]	" CUSTOMIZE "	[SELECT]	"MAX TIME "	0
		[SELECT]	"CHANGE UNITS"	1
		[SELECT]	"HR INPUTS"	2
		[SELECT]	"LANGUAGE"	4
		[SELECT]	"CONTRAST ADJ"	5
		[SELECT]	"MAX SPEED"	6
(Treadmill)			"MAX STEPS/MIN"	6
(Stepmill)		[SELECT]	"CLINICAL MODE"	7
(Bike)		[SELECT]	"ENABLE MAG KEY"	8
(Treadmill)		[SELECT]	"SET DEFAULTS "	9

or directly:

[LEVEL: ^][3][0]	" MAX TIME "	[ENTER]	" TIME 20 "	
			use keypad to change then	
[ENTER]				
[LEVEL: ^][3][1]	"CHANGE UNITS"	[ENTER]	" USA UNITS " or " METRIC UNITS "	
			use [SELECT] to change option	
then [ENTER]				
[LEVEL: ^][3][2]	"HR INPUTS"	[ENTER]	" LOCKED INPUTS "	
			" EITHER INPUT "	
			" TELEMETRY ONLY "	
			" HAND ONLY "	

then [ENTER]
 [LEVEL: ^][3][4] "LANGUAGE" [ENTER] " ENGLISH "
 " SPANISH "
 " GERMAN "
 " FRENCH "
 " ITALIAN "
 " SWEDISH "
 " DUTCH "
 "JAPANESE"
 use [SELECT] to change option
 then [ENTER]
 [LEVEL: ^][3][5]
 CONTRAST XX "
 "CONTRAST ADJ" [ENTER] "
 increase, decrease to change then
 [ENTER]
 [LEVEL: ^][3][6]
 XX.X " (Treadmill Only)
 or "MAX STEPS/MIN" [ENTER] " MAX STEPS/MIN XXX" (Stepmill
 Only)
 use keypad to change then
 [ENTER]
 [LEVEL: ^][3][7]
 or " ON " (Bike Only) "CLINICAL MODE" [ENTER] "OFF "
 [LEVEL: ^][3][8]
 or " ON " (Treadmill Only) "ENABLE MAG KEY" [ENTER] "OFF "
 [LEVEL: ^][3][9]
 DONE " "SET DEFAULTS " [ENTER] "
 use [ENTER] to set back to Defaults

descriptions:

ADJ CONTRAST	Adjust the LCD screen contrast.
MAX TIME	Set maximum workout time, press 0 for NO TIME LIMIT or 5-99 for a set MAX TIME. Once reached the machine enters cool down and does not allow user to adjust the intensity or view statistics.
CHANGE UNITS	Select either metric (KM, KMH, and KG) or US (Miles, MPH, and LBs)
CLINICAL MODE	With the "Clinical Mode" set to "On", the Bike can operate at Level 0. The "On" state should only be selected when a charger is plugged into the bike or the battery may be discharged. The "Pedal Faster" message will not be displayed when operating with the "Clinical Mode" turned "On". The displayed wattage will be inaccurate if the "Clinical Mode" is turned "On" without a charger being plugged in, and Level 0 is selected.
MAX SPEED selection.	Treadmill only, limits the top speed of the treadmill to selection.
MAX STEPS/MIN	Stepmill only, limits the top step rate of the stepmill to selection providing it is within min/max limits.

HR INPUTS	Allows owner to disable heart rate monitoring, so that no BPM is displayed. In addition, the inputs can be selected as to which type of signal can be detected. This selection is used to calculate the user's BPM if available. If both are selected, the first signal detected inhibits the second from being used. See the HR section for more details. Not Locked implies either input is available after the signal is lost even during a workout.
LANGUAGE	The language that all of the message line prompts are displayed in.
ENABLE MAG KEY	For Treadmills, the Magnetic Key Lock may be enabled or disabled here. OFF allows use of the device without the key being installed on the console. This is set to ON automatically by placing the Key on the system.
DEFAULTS SET	Sets all "customizable" features of the console back to factory settings. See the last page for a list of default settings. Elapsed time (both Total and Service interval) distance and workouts are not reset to zero.

Machine Status

[^][4][0] display machine run time in hours
[^][4][1] display number of workouts
[^][4][2] display distance traveled or floors climbed for (stepper/stepmill)
[^][4][3] display software rev or Firmware Part number
[^][4][4] display machine type
[^][4][5] display drive board revision
[^][4][6] display machine run time in hours since last cleared (Servicing)
[^][4][7] display clinical mode status (only Bikes)
[^][4][8-9] - spare -

to Scan:

[LEVEL: ^][4][ENTER] " MACHINE STATUS"	[SELECT]	" RUN HOURS
99999" 0		
	[SELECT]	" WORKOUTS
9999" 1		
	[SELECT]	" DISTANCE
9999" 2		
	or	" FLOORS
99999" 2		
XXX "	[SELECT]	" CONS 40055-
	[SELECT]	" BIKE "
	[SELECT]	" TM DRIVE VER XX"
	[SELECT]	" MAINT HOURS 9999"
	[SELECT]	" CLINICAL XXX"

or directly:

[LEVEL: ^][4][0] " RUN HOURS 99999"	Total Device operating time.
[LEVEL: ^][4][1]	" WORKOUTS 9999" Total number of Workouts
[LEVEL: ^][4][2] " RUN DISTANCE 9999"	Total Distance based on cumulative workouts
or " FLOORS 99999"	Total Floors climbed(stepper/stepmill)
[LEVEL: ^][4][3] " CONS xxxxx- xxx "	Console F/W Part Number
[LEVEL: ^][4][4] " BIKE "	Console's Device Configuration
[LEVEL: ^][4][5] " TM DRIVE VER xx"	TM only - Drive F/W version number
[LEVEL: ^][4][6] " MAINT HOURS 9999"	Reset-able timer to track servicing. See "Diagnostic 2" for clearing or setting details.
[LEVEL: ^][4][7] " CLINICAL XXX"	Shows Clinical mode of Bike - automatically set when using battery charger. Modes are ON, OFF and (blank) for not known.

R and D

[^][5][0] program loop
[^][5][1-9] - spare -

to enter directly:

[LEVEL: ^] [5] [ENTER] " R AND D" [SELECT] " PROGRAM LOOP"

or:

[LEVEL: ^] [5] [0] [ENTER] "OFF " or " ON "
use [SELECT] to change option then [ENTER]

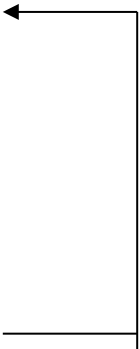
R and D code description:

PROGRAM LOOP The machine infinitely loops in the selected program if ON. After the program is stopped, by turning the machine off or pressing the POWER key (TMs), looping is automatically disabled. If OFF is selected the looping feature is also cancelled.

Diagnostics

[^] [6] [0]	test display	(alternate entry available-see description)
[^] [6] [1]	test keyboard	
[^] [6] [2]	test serial port	
[^] [6] [3]	test alternator	
[^] [6] [4]	spare	
[^] [6] [5]	spare	
[^] [6] [6]	test tach response	
[^] [6] [7]	test Input / Output pins	
[^] [6] [8]	report TM Drive Bus Voltage	
[^] [6] [9]	report TM Grade Pot Voltage	

to Scan:

[LEVEL: ^] [6] [ENTER] " DIAGNOSTIC "	[SELECT]	"DISPLAY TEST"		
0	[SELECT]	"KEY TEST"		1
	[SELECT]	"SERIAL TESTS"		2
	[SELECT]	"ALT TEST"		3
	[SELECT]	spare		4
	[SELECT]	spare		5
	[SELECT]	"TACH TEST"		6
	[SELECT]	"I/O TEST"		7
	[SELECT]	"BUS VOLTS"		8
	[SELECT]	"GRADE ACT"		9

or directly:

[LEVEL: ^] [6] [0] "DISPLAY TEST"	[ENTER]	Display alternates at a 2 second rate
[LEVEL: ^] [6] [1] "KEY TEST"	[ENTER]	Key name is shown with key press
[LEVEL: ^] [6] [2] "SERIAL TESTS"	[ENTER]	" CSAFE TEST" or "TM DRIVE TEST" press [SELECT] then [ENTER] Results will be: (as appropriate) "RUNNING" " PASS " " FAIL " " ON " or " OFF " " RUNNING " " ON " or " OFF " "TAR TACH ACT" (with other info on digit displays)
[LEVEL: ^] [6] [3] "ALT TEST"	[ENTER]	
[LEVEL: ^] [6] [4] spare	[ENTER]	
[LEVEL: ^] [6] [5] spare	[ENTER]	
[LEVEL: ^] [6] [6] "TACH TEST"	[ENTER]	

[LEVEL: ^] [6] [7] "I/O TEST"	[ENTER]	"AUX I/O B+" (with
other info on digit displays)		
[LEVEL: ^] [6] [8] "BUS VOLTS"	[ENTER]	" BUS VOLTS XXX"
[LEVEL: ^] [6] [9] "GRADE ACT"	[ENTER]	"GRADE ACT XXX"

descriptions:

DISPLAY TEST Screen alternates between: all LCD segments turned on and an operationally representative screen at a 2-second rate. *As an aid for production testing, pressing the MUTE and COOL DOWN keys together after applying power to the system will enter this test.*

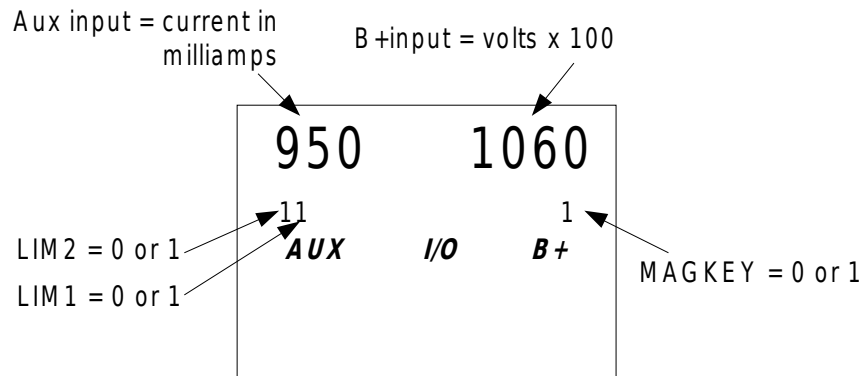
KEY TEST Pressing any key displays that key name on the message line. Press [CLEAR] to exit. IF all keys have been pressed (except for [CLEAR]) instead of displaying the particular key name, the message "PASS" is shown to indicate all keys were successfully identified and pressed, any additional keys pressed will continue to display "PASS" until [CLEAR] is pressed.

SERIAL TESTS Performs a serial loop back test. Select either the CSAFE RS-232 connection or (for console tests only) the TM DRIVE RS-422 connection. The operator will need a loopback test device inserted into the appropriate connector to successfully run this test. Test results will be displayed until CLEAR is pressed.

ALT TEST A switch for the alternator field. For "Field on" press [^] and off press [V].

TACH TEST RPM above 2000 causes FIELD OUT signal to go high, below this point results in a low.

I/O TEST See the following figure for display details.



To FORCE the following outputs press either the [^] or [v] keys:

[^] Key or default	CL_ROUT = 5 volts, PT_ROUT = VUNREG, BIKE_WD = 5 volts, STEP_WD = approximately 2 Hz, 5 volt square wave (connection of an LED and visual verification is acceptable)
[v] Key	CL_ROUT = 0 volts, PT_ROUT = 0 volts, BIKE_WD = 0 volts, STEP_WD = 0 volts

BUS VOLTS Treadmill only. Displays Bus voltage on the Drive board.

GRADE ACTUAL Treadmill only. Displays the Actual Grade. UP / DOWN is active.

Diagnostic 2

[^][7][0] Display Error Log
[^][7][1] Maint Hours
[^][7][2-9] - spare -

to Scan:

[LEVEL: ^][7][ENTER] " DIAGNOSTIC 2 " [SELECT] "ERROR LOG" ←
0
[SELECT] "MAINT HOURS" 1

or directly:

[LEVEL: ^][7][0] "ERROR LOG" [ENTER] "ERROR NAME XXXX"
[LEVEL: ^][7][1] "MAINT HOURS" [ENTER] "MAINT HOURS 0"
[0 - 9] "MAINT HOURS XXXX"

descriptions:

ERROR LOG Display Logged Errors and Machine time. Press ^ or v keys to scroll through the errors. Press [CLEAR] to exit. The Upper Right Field will display the log position counter.

MAINT HOURS The service time can either be cleared, set to zero, or set to any number up to the maximum number of hours. Normally the time would be cleared or or set to zero when service is performed. Note that this is different than the MAINT HOURS under **Machine Status** in that it enables the MAINT HOURS to be changed.

Configuration

[^][8][0] Change Machine ←
[^][8][1] Change Bike Gear
[^][8][2-9] - spare -

to Scan:

[LEVEL: ^][8][ENTER] " CONFIGURATION " [SELECT] " CHANGE MACHINE "
[ENTER]

then (the current configuration is shown)

[SELECT] " STEPPER "
[SELECT] " STEPMILL "
[SELECT] " 1-10MPH TM 0-12 "
[SELECT] " 1-12MPH TM 0-15 "
[SELECT] " ELLIPTICAL "
[SELECT] " BIKE "
[SELECT] " CROSSROBIC "
[SELECT] "CONFIG RQRD "

or directly:

[LEVEL: ^][8][0] " CHANGE MACHINE " [ENTER] "(the current configuration is shown)"
use [SELECT] to change device then [ENTER]

Note: For bikes there is an additional selection to specify the gear (early models of 3300/3900):

[LEVEL: ^][8][1] "CHANGE BIKE GEAR" [ENTER] "24/1 PRIOR 10/98" or "30/1 AFTER 10/98"

use [SELECT] to change, then
[ENTER]

Fit Tests

[^][9][0] Fit test

[^][9][1] CPAT (Fireman) Fit Test - CLIMBERS only

[^][9][2] NYFCD (Fireman) Fit Test - CLIMBERS only

[^][9][3] GERKIN (Fireman) Fit Test - TREADMILLS only

[^][9][4-9] - spare -

Pressing [ENTER] at any of the above selections causes the machine to go to the state that displays the workout. Scanning of the tests is not appropriate for this feature.

directly:

[LEVEL: ^][9][0] "FIT TEST" [ENTER]

[LEVEL: ^][9][1] "CPAT" [ENTER] - CLIMBERS only

[LEVEL: ^][9][2] "NYFCD" [ENTER] - CLIMBERS only

[LEVEL: ^][9][3] "GERKIN TEST" [ENTER] - TREADMILLS ONLY

Defaults

Machine(Device) Type:	None
Climber Type:	Stepper (as opposed to Stepmill)
Elliptical Type:	Classical
Treadmill Speed:	1-12mph speed, 0-15% grade
Stratus Gear Ratio:	30:1
Contrast:	6 (may be machine specific, final contrast to be defined by the hardware)
Language:	English
Workout time limit:	no limit
Speed Limit:	10 mph or 12 mph (Treadmill only)
Max Step Rate:	162 steps/min (Stepmill only)
Clinical Mode:	Off (Bike only)
Magnet Key Required:	Deactivated (Treadmill only)
Units:	US
Heart rate Inputs:	Enable: both Hand and Telemetry inputs allowed and will lock or keep the input sensed during workout even after a loss of signal.
Workout Time:	20 minutes
Level:	1
Age:	40
HR % of Max Age	70%
Speed	3 mph (Treadmill only)
Plates	5 (Crossrobics only)
Weight	80Kg (176 lbs)

