2017
Programming and Console Specs
XER, XIR

Modified By: Jarrod Schiessl | Rev: 6.08
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Revision History I

Revision	Associate Software Version	Date	Change Description	Author
1.0	-	September 30, 2015	Initial Release	Johnluke Siska
2.0	-	November 6, 2015	Removed unnecessary pages, added THR and Constant Watts screens, Edit User screens, Overlay, Updated Track App flow diagram, Updated Register New User and Workout Setup Screens.	Johnluke Siska and Evan Skov
3.0	-	December 3, 2015	Removed a duplicate page. Mostly reviewing OM.	Johnluke Siska
4.0	-	December 10, 2015	Updated Sprint 8 Workout in response to EWM-408.	Johnluke Siska
4.1	-	February 12, 2016	Added note to Definitions about keypad behavior for EWM-525. Updated THR Workout to match Generations for EWM-646. Updated Sprint 8 Workout to match Generations. Charts in line with EWM-644, EWM-315, EWM-486, EWM-318, EWM-501, EWM-500, EWM-316, EWM-499, EWM-484. Update Sprint 8 Workout Summary to note Average Watts calculation for EWM-423. Updated Gerkin to address EWM-549. Updated the Watts tables to address EWM-629. Updated Workout charts except for Cooper and Constant Watts, addresses EWM-628 and EWM-679. Noted on Sprint 8 Summary that total score is the aggregate of all sweat scores. Addresses EWM-421. Updated Change Workout.	Johnluke Siska
4.2	-	February 19, 2016	Updated the Machine Settings, Service Mode and Engineering Mode Specs. Also updated Restore to Factory Defaults. Addresses EWM-593, EWM-600, EWM-433, EWM-434, EWM-436, EWM-439, EWM-443, EWM-444, EWM-445, EWM-453, and EWM-546. Updated Sprint 8 Workout Screen for Simple App. Update Cooper Fitness Test to address EWM-635, EWM-665, EWM-630	Johnluke Siska
4.3	-	February 26, 2016	Added Default Workout Behaviors. Changed Program Main Screen to Workout Map and updated it with the most recent workouts per console and frame. Removed Fat Burn for TM and AURE 50-Series. Removed the fitness tests Cooper and Gerkin. Removed the Specifications and Features page that listed workouts as that is specified elsewhere. Updated Specifications and Features to generalize USB charging – see EWM-760. Removed Workout Settings Map and added a page with the workout settings for each frame in the Program Main Screen section. Resolves EWM-313, EWM-404, EWM-405, EWM-406.	Johnluke Siska
4.4	-	March 18, 2016	Updated the Sprint 8 Chart or A30 (level 3 and 20 were incorrect). Added Auto-Reboot option to Engineering Spec to match Generations. Added RSCU for the console side. Updated the Sprint 8 and Standard Workout Summaries with the new screens. Removed Fitness test mentions. Addresses EWM-867. Noted that Heart Rate shows a dash or the current Heart Rate in Sprint 8, there is also no flashing of the Heart Rate. Addresses EWM-851. Updated Sprint 8 windowed media mode pictures and notes to address EWM-752 and EWM-751.	Johnluke Siska
4.5	-	March 23, 2016	Added a page to clarify ErP vs Demo Video, addresses EWM-627. Updated Audio Source Control to address EWM-563 and EWM-564. Updated Media Player Behavior for Shuffle + Repeat to address EWM-526 and EWM-527. Added an Application Setup page to address EWM-586. Updated the Sprint TM Chart, addresses EWM-942. Added note to the Formulas I page that the calculations have an error tolerance of ±5%. Addresses EWM-320. Updated First Time Setup, added Model Names table and MCB/LCB table.	Johnluke Siska
4.6	-	April 1, 2016	Modified Sprint 8 Workout Summary to clarify EWM-420. Updated the workout summary tables (moved labels) to address EWM-427. Updated the Specifications and Features to address EWM-965. Added note to the Go/Workout Setup Screens and VA app page about how the Go/Workout Setup Screen does not support hot plugging of VA content to address EWM-968. Updated Welcome/Go Screen and Edit user to address EWM-1061 and EWM-1099. Added note to Sprint 8 Workout Screen that Virtual Active is not available during Sprint 8, addresses EWM-1129. Updated Sprint 8 and Default Workout Behaviors to note that when resuming from pause the speed will be set to the machine minimum except for Sprint 8 Active Recovery which will be set whatever that speed is. Made Serial Numbers read only for Service and Engineering Modes, addresses EWM-1136. Changed the range of AURE to be 1.0-62.0 Miles, addresses EWM-1138. Added note to Workout Summary about how the Screen Timeout timer starts over on user interaction, addresses EWM-1150. Cleaned up Sprint 8 Windowed Description to address EWM-751.	Johnluke Siska
4.7	-	April 5, 2016	Added notes that 30-Series will NOT display Watts to address EWM-1044. Updated MyFitnessPal to try to address EWM-1142. Updated Simple App, included Watts info. Updated the Settings Tables with a description about forgetting network settings under Wifi Setup.	Johnluke Siska

Revision History II

Revision	Associate Software Version	Date	Change Description	Author
4.8	-	April 11, 2016	Updated the default Pause Behavior. Updated THR Workout to note that on some A/LBA frames the user cannot adjust incline as there are no physical buttons to do so. Added how to access Machine Settings, Service Mode and Engineering Mode.	Johnluke Siska
4.9	-	April 21, 2016	Added note about how Mute works from the audio/settings menu, addresses EWM-1207. Updated THR program to note you cannot skip the warm up. Removed the Reboot Inactive Time category from Engineering Mode Spec, addresses EWM-1038. Removed mention of Product 360 as it is ill-defined, addresses EWM-1139. Clarified media file format support through the Media Player for USB drives vs Android devices, addresses EWM-1193. Updated First Time Setup to indicate when you go to the Go/ Welcome Screen and when you go to the Login/Register User Screen, addresses EWM-1265. Added more info about the MCBs and LCBs that are supported by Black Widow. Updated the Restore Factory Defaults table and noted that when moving the console to a new frame the user must Restore Factory Defaults, addresses EWM-1206. Updated Create User and created a Viafitness page to address EWM-1227. Updated Change Workout App to address EWM-1271. Updated Apps List to address EWM-1246.	Johnluke Siska
5.0	0.7.1.0	April 26, 2016	Noted in FTS and Create User that if there is no internet connection then it jumps directly to the First Name Screen. Updated Edit User and Create New User with new screens, removes Share Workout Info which is done online and is for connected accounts like Twitter. Noted that when creating a new user using an existing xID the console will return to the Welcome/Go Screen upon successful login. Additionally, when deleting a user the console will return to the Welcome/Go Screen logged in as Guest. Addresses EWM-1218. Removed Elevation from the Ascent stats for Simple, Stat Stacks and Workout Summary to address EWM-1205. Made another note for THR (can't skip warm up, not even on Treadmill as there's no sole 'Go' button) to better clarify for EWM-1169. Changed a Sprint 8 Setup Picture to address EWM-941.	Johnluke Siska
5.1	1.0.2.0	May 5, 2016	Removed Headphone Removals from Service and Engineering Modes, will only have one count. Addresses EWM-1151. Noted how to interpolate Watts in the Watts tables for various RPM. Updated M/E/S Setting Spec to address EWM-1329, specifically Screen Timeout does not affect M/E/S modes. Added DAPI Environment Setting to Engineering Mode, addresses EWM-1352. Update Audio Source control to note that My Media pauses when AUX Input activates, addresses EWM-1297. Added Update options to Machine Settings, addresses EWM-1195. Added Netflix App page to address EWM-1190.	Johnluke Siska
5.2	1.0.5.0	May 13, 2016	Noted additional method of Watts lookup. Added note about workout reporting to Workout Summary (EWM-1283). Added note to not plug in an SD Card while My Media is running (EWM-958). Updated Target Heart Rate App workout and warm up screens to address EWM-939. Updated the screen shots for Sprint 8 when in Simple or another app full screen. Also noted which values are the current stage and which are for the upcoming sprint. Addresses EWM-946. Updated Constant Watts workout and noted the difference in the up/down arrows adding/subtracting Watts in Workout Setup compared to during the Constant Watts workout (addresses EWM-1354).	Johnluke Siska
5.3	1.0.8.0	June 1, 2016	Noted in the Audio Control page that when something is plugged into Aux Input if My Media is playing a video it continues to play that video. Updated elevation formula for the treadmill based on bugs for Generations and Max Headroom, addresses EWM-428. Updated Service and Engineering Spec sheet weight ranges (**reverted**).	Johnluke Siska
5.4	1.0.15.0	June 28, 2016	Updated RAM to be 2GB in Specifications & Features. Revised a note for Sprint 8 that if a user pauses during a Sprint, then when they resume the Sprint the workout will go immediately to the following Active Recovery or Cool Down. All pause behaviors are still followed (if in rapid succession). Should better resolve EWM-1613. Update the description and pictures for the lock/unlock screen function on all frames, addresses EWM-1620. Added description of logic for going from Calorie/Distance based workouts to Time-based ones. Also tried to address EWM-1463 with note about changing your workout near to the Default Workout Time. Made a page noting the current differences between First Time Setup, Restore to Factory Defaults and LCB Detection. Also updated the Restore to Factory Defaults table. Affects EWM-1448 and EWM-1568. Updated Default Workout Distance and Calibration in Service/Engineering Mode Specs. Addresses EWM-1491. Added description for Last Value Behavior to Definitions II page to address EWM-1417.	Johnluke Siska
5.5	1.0.27.1	August 4, 2016	Added TM Speed Range Error page.	Johnluke Siska
5.6	1.0.30.0	August 15, 2016	Added Heart Rate Precedence to the Definitions II page to address EWM-1669. Removed the last line from the Last Value Behavior description of Definitions II as confirmation only happens as described when tapping the last value button (and speed change is over 1.1 mph). Addresses EWM-1417. Updated RSCU flow to match actual behavior; specifically ErP/Demo Timer will reset while the updates are downloading and when they finish and the Timer reaches 0 the updates will install. Addresses EWM-1688	Johnluke Siska
5.7	1.1.3.0	November 2, 2016	EWM-1653: Updated all Settings Spec sheets to remove the Show Setup Wizard option as that is handled by Restore to Factory Defaults. EWM-1713: Added an explanation of the pedaling algorithm to the Workout – Default Behaviors page(s). EWM-1715: Updated Definitions II and App – Change Workout I pages to explain how adding/ removing time from a workout with intervals works and how modifying only the level of the current workout in Change Workout does not restart the workout at interval 1.	Johnluke Siska

Revision History III

Revision	Associate Software Version	Date	Change Description	Author
5.8	1.1.11.0	March 7, 2017	ErP defaults to 'Check' and a 30 minute timeout. ErP On/Off no longer affected by Restore to Factory Defaults. ErP is now 'Energy Saver'. Added Lube Belt/Chain page.	Johnluke Siska
5.8.1	1.2	March 8, 2017	• Added support for Passport 2.0	Leaf Chen
5.8.2	1.2	March 23, 2017	• Added Page Error Codes • Added Page Workout Paused	Leaf Chen
5.8.3	1.2	March 29, 2017	• Added page Workout – Manual Pause	Leaf Chen
5.8.4	1.2	March 31, 2017	• Added page Lube Belt Reminder	Leaf Chen
5.8.5	1.2	April 5, 2017	• Added page TM Motor Braking Error (Go Button should be disabled during Motor Braking warning) • T30 Speed Range Error is same as T50	Leaf Chen
5.8.6	1.2	April 13, 2017	• Updated screenshot for First Time Setup	Leaf Chen
5.8.7	1.2	April 17, 2017	• Updated screenshot for T75 and Passport	Leaf Chen
5.8.8	1.2	April 20, 2017	• Updated the WiFi icon definition	Leaf Chen
6.0	1.2.0.0	April 20, 2017	Added C50 to Specifications & Features (p.5) Added Climbmill Model to First Time Setup (p.8) Updated Machine, Service and Engineering Setting Spec to include Climbmill options (pp.20-22) Noted last value behavior for Climbmill on the Definitions II page (p.30) Updated Formulas to note Climbmill will use a Watts table and added an SPM table (pp.31-32) Added Climbmill Watts table page (p.38) Added Climbmill E-Stop page (p.45) Added Climbmill Program Main Screens (pp.50-52) Updated Stat Stacks on Workout Home Screen (p.75) Updated Stat Stacks on Simple App (p.95) Added Climbmill Workout Screen (p.73) Updated Workout Map to include Climbmill (p.78) Added Landmarks Workout (p.90) Updated Factory Defaults (p.107) Updated Workout Summary Tables for Climbmill (p.77) Updated Change Workout Table with Landmarks (p.99) Updated THR to include Climbmill (p.92) Added Fat Burn Workout for Climbmill (p.86) Noted Rolling Hills on 50-Series works for Climbmill (p.85) Noted Intervals Resistance on 50-Series works for Climbmill (p.83)	Johnluke Siska
6.0.1	1.2	May 10, 2017	• Updated the max incline of T75 from 15% to 12% and as well as T30(p.7)	Leaf Chen
6.0.2	1.2	May 16, 2017	• Waking up from demo will resume BT Music playing(p.24) • Added page **Calibration III** for T70(p.120)	Leaf Chen
6.0.3	1.2	June 05, 2017	• Updated the weight range of C50 from 50-300 lbs to 99-300 lbs (p.50)	Leaf Chen
6.0.4	1.2	June 16, 2017	• Removed page ErP Mode vs Demo Mode (p.24) • Created page ERP Mode vs Promotional Video (p.24) • Added page Error Code I and Error Code II (p.125, p.126)	Leaf Chen
6.0.5	1.2	June 30, 2017	• Removed incline from Workout Screen (C) (p. 73)	Leaf Chen
• 6.0.6	• 1.2	• July 11, 2017	• Updated Machine Setting spec to reflect UI changes. • Updated steps per floor and total steps on Workout – Landmarks p. 90 • Added note to address Bug EWM-605 regarding default date. p.20 • Workout Screen (C) p. 73: Revised flowchart to match updated UI addresses bugs: EWM-2097, EWM-2096, EWM-2095, EWM-2094 • Apps List p. 43: Updated standard apps list to match updated UI/UX, addresses bugs: EWM – 2067, EWM-2148, EWM, 2147 • Program Main Screen (C) II p. 51: Revised flowchart to match current UI/UX. Removed Constant Watts, Fitness Test – addresses bugs EWM-2092, EWM 2041 • Program Main Screen (C)III p. 52: Revised flowchart to match current UI/UX. Removed Constant Watts, Fitness Test – addresses bugs EWM-2092, EWM 2041 • Message Center pg. 25: Updated disable keyboard warning section with test info and updated UI info. Addresses bug EWM-2193 • Engineering Mode III pg. 113: Added Calibration screen shot for climbmills. Addresses bug EWM-2055. Added Advanced Settings Screen Shot. Addresses but EWM-2059. • App – Simple pg. 95: Removed C for climbmill on Pace and Average Pace. Addresses bug EWM 2105	• Jolene Enge

Revision History IV

Revision	Software Version	Date	Change Description	Reason for Change	Author
6.0.7	1.2	9/6/2017	1. Lube Belt/Chain pg. 69: Revised to include T70/T30. Addresses Bug EWM– 2211 2. TM Speed Range Error pg. 67: Revised to include T70/T30. Addresses Bug EWM–2201	1. Clarify Spec 2. Clarify Spec	Jolene Enge
6.0.7	1.2	9/14/2017	1. Calibration IV pg. 122: Added page for T75 calibration. Addresses Bug EWM– 2212 2. A 30 – Series Watts (remove feature) pg. 35 / UR 30 – Series Watts (remove feature) pg. 36 / E 30 – Series Watts (remove feature) pg. 38: Added note to state 30 series does not have watts. Addresses Bug EWM 2229	1. Clarify Spec 2. Clarify Spec	Jolene Enge
6.0.8	1.3.0.0	11/21/2017	1. Updated Engineering Mode screenshot page. Addresses EWM-2259 2. Updated Service Mode screenshot and Workout Screen pages and added Machine Settings screenshot page	1. Flowchart 2. Flowchart	Jarrod Schiessl
6.0.9		03/19/2018	Added 10 additional landmarks to Workout-Landmarks page (pg 88)	EWM-2322	Jarrod Schiessl

I. Main function

- Based on the Generations software, this software brings the GUI to retail and replaces EB White.
- Runs on Android OS or other free open source OS.
- Includes auto login to Viafit handled by DAPI.
- Workout tracking data Via DAPI (communicates with Netpulse).
- Will have the capability for OTA system (OS/firmware/GUI) updates going through DAPI or USB.
- Internet + Web Apps + 3rd Party Apps
- USB Charging up to 5V, 1A (5W).
- Passport Compatibility – Console will be able to connect to Passport and run a Virtual Active workout from Passport on the console. Passport will control the machine and display the Virtual Active course.
- ErP mode – should save state of console and power off except for IO that can restore full functionality on button press.

II. Other functions

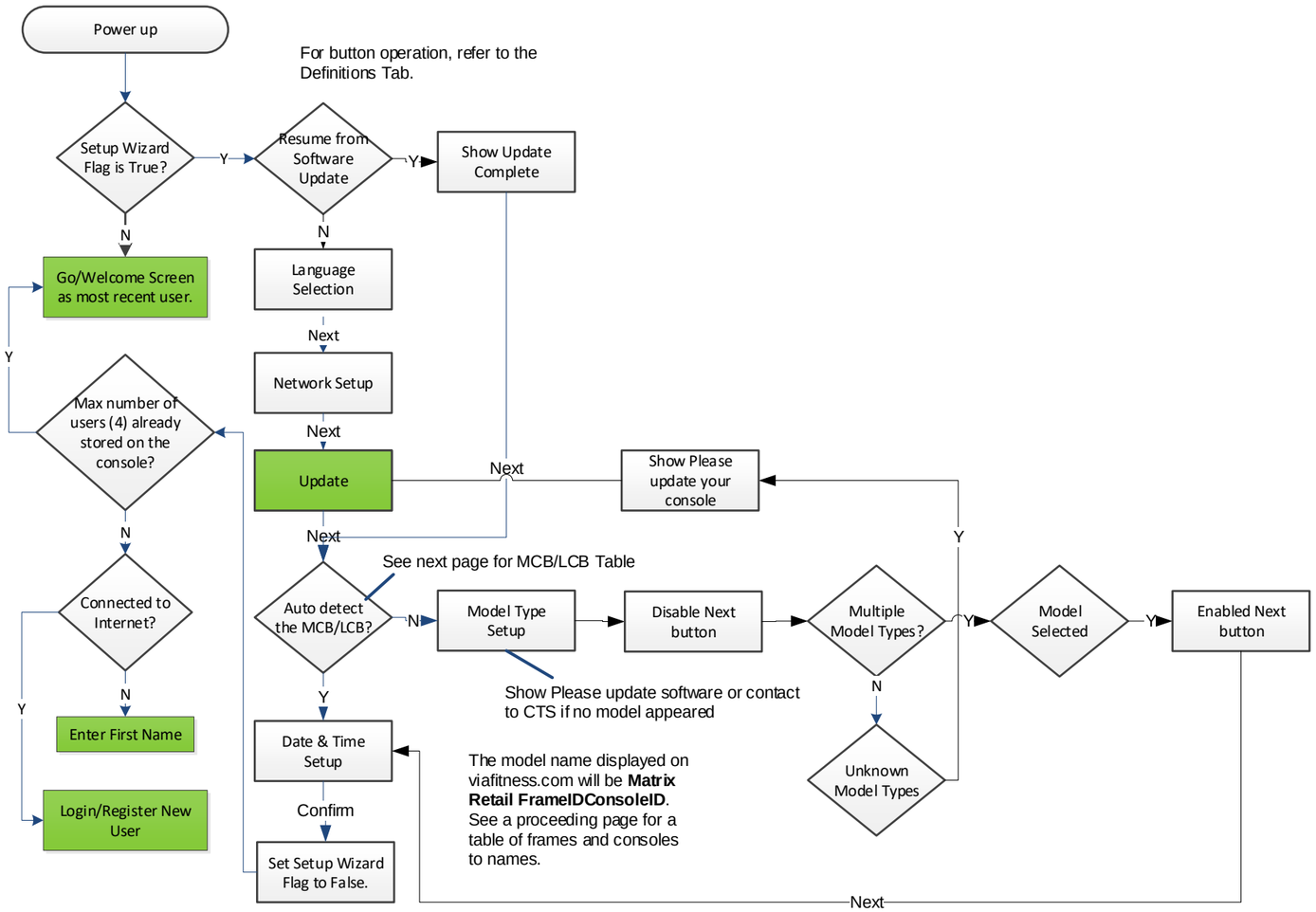
- Multi-language display
  Refer to Languages page
- User & Guest Login
- Twitter support
- VA capability via built in microSD Card slot
- USB device (flash drive) Media player support (Audio: mp3|wav|aac|H.264|HE-AACX Video: mpg|mp4|mov)
- Android device Media player support via USB (MTP) – Only supports native Android formats (Audio: mp3|wav|aac (HE-AACX) Video: mpg|mp4 (H.264))
- Bluetooth audio source + heart rate monitor support
- Bluetooth sink audio playback support (xir only)
- Machine/Engineering/Service Modes

III. Specifications

Supported Models list: R30-03, R50, U30-02, U50, SE30, SE50, A30-02, A50, TF30, TF50, T30, T50, T75, T70-02, C50

Display:	TFT Full Color HD LCD 15.6 inches (1366 x 768 pixels) on xir, 10.1 inches (1024 x 600 pixels) on xer.
Touch Panel:	Resistive Touch Panel with Single Touch Function.
OS:	Android 4.2.2
Processor:	Cortex-A9 Dual Core CPU.
RAM:	2GB DDR3 SDRAM
Built-in Storage:	4GB eMMC with optional microSD Card (up to 64GB) for VA.
WiFi:	Yes
Bluetooth:	Yes, 4.0 Audio Sourcing + BLE on xir/xer. Bluetooth 3.1 Audio Sink on xir.
Personal fan:	None
Speaker:	Yes. 3 Watt stereo on xer. 5 Watt stereo on xir (KC Premium Speaker).
Earphone Jack:	Yes, both line-in and line-out.
USB:	Yes, but no MFI support.
ROM:	15MB eMMC Recovery Partition.

First Time Setup I

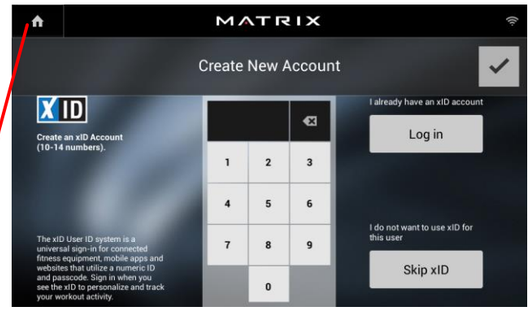


Press to go back to the previous screen

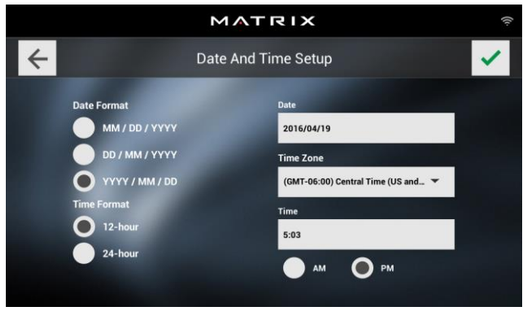
Press to skip to the next screen

Press to confirm and go to the next screen.

Necessary information not yet entered or valid.



Note: You can tap Home to go to the Go/Welcome Screen as a Guest.



Known MCB and LCB Types

MODEL	Machine Type	MCB/LCB Type	Type Code	MCB/LCB Model
A30	AS	EP_0B_JIS	0X0B	ECB Motor Incline EP LCB
U30	BK	DIGITAL_ECB	0X12	ECB Motor
E30	EP	DIGITAL_ECB	0X12	ECB Motor
R30	BK	DIGITAL_ECB	0X12	ECB Motor
A50	AS	INDUCTOR_BRAKE_INCLINE	0X15	Incline Induction Brake LCB
U50	BK	BIKE_OC_JIS	0X0C	Induction Brake LCB
E50	EP	BIKE_OC_JIS	0X0C	Induction Brake LCB
R50	BK	BIKE_OC_JIS	0X0C	Induction Brake LCB
TF30	TM	DC_LCB_30_325HP_JIS	0X0E	MCB (JIS TM)
TF50	TM	DC_LCB_30_325HP_JIS	0X0E	MCB (JIS TM)
T50	TM	DC_LCB_30_325HP_JIS	0X0E	MCB (JIS TM)
T70	TM	MCB_DELTA	0XC2	Yang Gang MCB
T70	TM	MCB_DELTA_COMMOCIAL	0XC3	Yang Gang MCB
T70	TM	MCB_TOPTEK	0XC1	Yang Gang MCB

Known MCB Types supported by Black Widow 1.2

MODEL	Machine Type	MCB/LCB Type	Type Code	MCB/LCB Model
T30	TM	DC_LCB_30_325HP_JIS	0X0E	MCB (JIS TM)
T30	TM	DC MCB 3.25HP 110V	0X06	MCB (JIS TM)
T30	TM	DC MCB 3.25HP 110V	0X04	MCB (JIS TM)
T75	TM	MCB_DELTA_COMMOCI	0XC3	Yang Gang MCB

All LCBs to be supported.

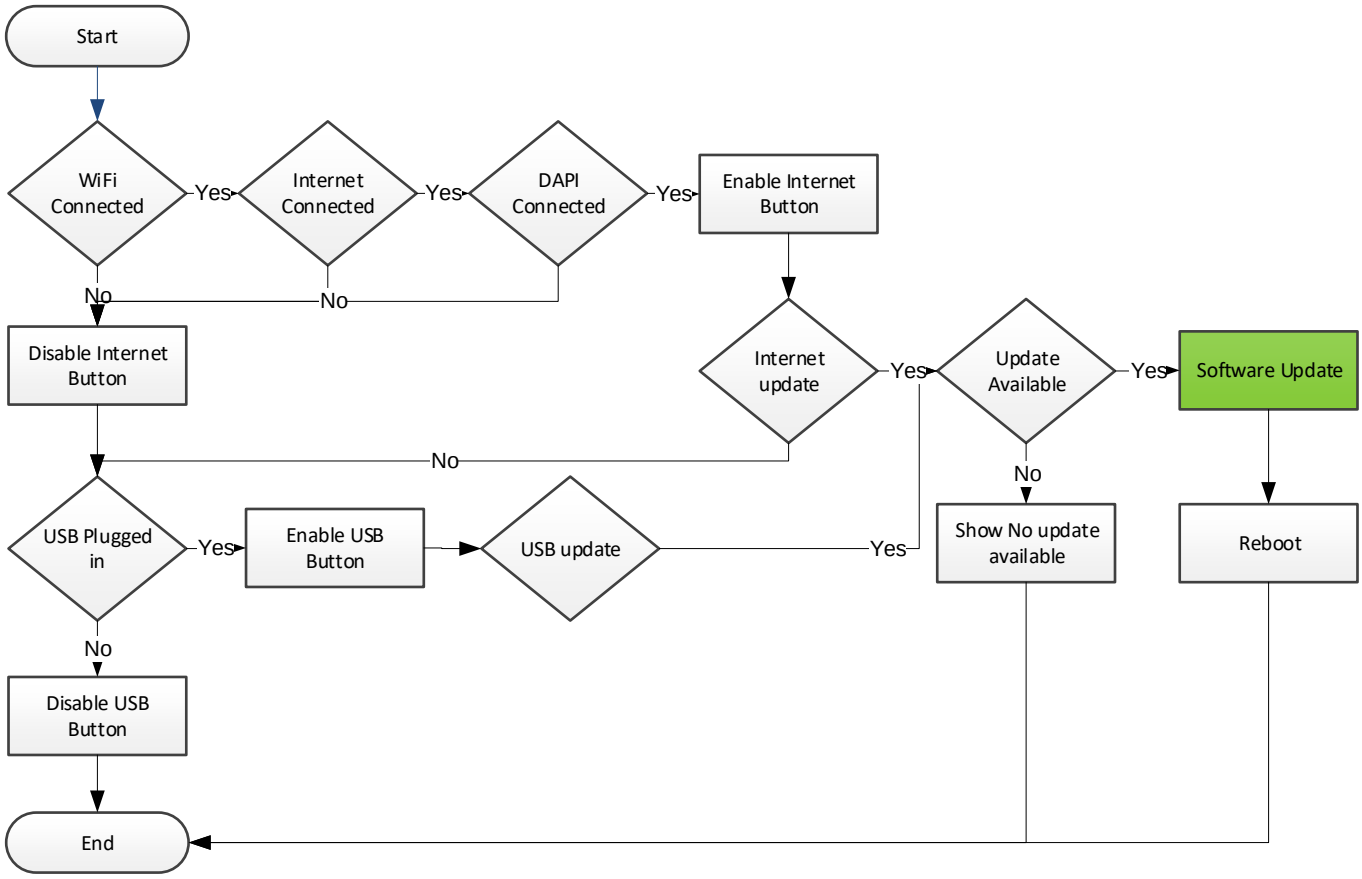
机型 - Model	電源規格 - Power Spec	马达 - Motor	LCB(ECB)	電控系統 - Electronic Control System	飛輪系統 - Flywheel System	大皮帶輪 - Large Pulley	小皮帶輪 - Small Pulley	阻力范围 - Resistance Range	備注 - Notes	Max. User Weight
R30-03(NA&ID)	12VDC	機電廠小馬達	S001325 HDPD V2.001	內磁	10.5KG內磁	ф260	ф35	1--20	2014年機種(Watt表同2012年R20)	350lbs / 159kg
U30-02(NA&ID)	12VDC	機電廠小馬達	S001325 HDPD V2.001	內磁	10.5KG內磁	ф260	ф35	1--20	2014年機種(Watt表同2012年U20)	350lbs / 159kg
R50(NA)	85V~265V AC	2012年新電磁鐵	MLH1003 HCPC 0X0C02	電磁鐵260W	NA	ф260	ф35	1--30	2014年機種(Watt表同2012年R40i)	350lbs / 159kg
R50(ID)	85V~265V AC	2012年新電磁鐵	MLH1305 HDPD 0C0102	電磁鐵260W	NA	ф260	ф35	1--30	2014年機種(Watt表同2012年R40i)	350lbs / 159kg
U50(NA)	85V~265V AC	2012年新電磁鐵	MLH1003 HCPC 0X0C02	電磁鐵260W	NA	ф260	ф35	1--30	2014年機種(Watt表同2012年U40i)	350lbs / 159kg
U50(ID)	85V~265V AC	2012年新電磁鐵	MLH1305 HDPD 0C0102	電磁鐵260W	NA	ф260	ф35	1--30	2014年機種(Watt表同2012年U40i)	350lbs / 159kg
A30-02(NA)	85V~265V AC	2014升降EP	MLH1105 HHPC 0X0B05	內磁	13.6KG內磁	φ 360	φ 35	1--20	2014年機種，watt?	148 kg / 325 lbs
A30-02(ID)	85V~265V AC	2014升降EP	MLH1306 HCPE B06	內磁	13.6KG內磁	φ 360	φ 35	1--20	2014年機種，watt?	148 kg / 325 lbs
A50(NA)	85V~265V AC	2014升降電磁鐵	MLH1202 HDPD V2.004	升降電磁鐵	NA	φ 360	φ 32	1--30	2014年機種，watt值是否參考Andes8需確認	159 kg / 350 lbs
A50(ID)	85V~265V AC	2014升降電磁鐵	MLH1401 HDPD V2.004	升降電磁鐵	NA	φ 360	φ 32	1--30	2014年機種，watt值是否參考Andes8需確認	159 kg / 350 lbs
E30(ID&NA)	12VDC	機電廠小馬達	S001325 HDPD V2.001	內磁	10.5KG內磁	φ 360	φ 37	1--20		325lbs
E50(ID)	85V~265V AC	2012年新電磁鐵	MLH1305 HDPD 0C0102	電磁鐵260W	NA	ф260	ф32	1--30		325lbs

All MCBs to be supported.

机型 - Model	電源規格 - Power Spec	马达 - Motor	下控 - MCB	跑帶 - Belt	滚轮 - Roller	大皮帶輪 - Large Pulley	小皮帶輪 - Small Pulley	速度范围 - Speed Range	升降范围 - Incline Range	Max. User Weight Support
TF30(NA)	110V AC	3.25HP(睿标)	MLH0914 HIPK V604	1.6mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	350lbs/159 kg
TF30(ID)	220V AC	3.25HP(睿标)	MLH1301 HBPB OE0103	1.6mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	350lbs/159 kg
TF50(NA)	110V AC	3.25HP(睿标)	MLH0914 HIPK V604	2.2mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	400lbs/181.8kg
TF50(ID)	220V AC	3.25HP(睿标)	MLH1301 HBPB OE0103	2.2mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	400lbs/181.8kg
T50-02(NA)	110V AC	3.25HP(睿标)	MLH0914 HIPK V604	2.2mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	400lbs/181.8kg
T50-02(ID)	220V AC	3.25HP(睿标)	MLH1301 HBPB OE0103	2.2mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	400lbs/181.8kg
T70-03（NA）	110V AC	AC1.5KW	隔岡1.1KW數位 H009 S007-3A	2.2mm	60mm	§ 89mm	§ 44mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	400lbs/181.8kg
T70-02（ID）	220V AC	AC1.5KW	台達1.1KW數位 H006 S001	2.2mm	60mm	§ 89mm	§ 44mm	0.5mph - 12.5mph(0.8-20KPH)	0-15%	400lbs/181.8kg
T30（NA）	110V AC	3.0HP(睿标)	MLH0914 HIPK V604	1.6mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-12%	350lbs/159kg
T30(ID)	220V AC	3.0HP(睿标)	MLH1301 HBPB OE0103	1.6mm	60mm	§ 89mm	§ 35mm	0.5mph - 12.5mph(0.8-20KPH)	0-12%	350lbs/159kg
T75	110V AC	AC1.5KW	隔岡1.1KW數位 H009 S007-3A	2.2mm	60mm	§ 89mm	§ 44mm	0.5mph - 12.5mph(0.8-20KPH)	0-12%	400lbs/181.8kg

Model	Console	Model ID	Model Name (Viafitness)
RECUMBENT (R)	XER	R30XER	Matrix Retail R30xer
		R50XER	Matrix Retail R50xer
	XIR	R30XIR	Matrix Retail R30xir
		R50XIR	Matrix Retail R50xir
UPRIGHT (U)	XER	U30XER	Matrix Retail U30xer
		U50XER	Matrix Retail U50xer
	XIR	U30XIR	Matrix Retail U30xir
		U50XIR	Matrix Retail U50xir
ELLIPTICAL (E)	XER	SE30XER	Matrix Retail SE30xer
		SE50XER	Matrix Retail SE50xer
	XIR	SE30XIR	Matrix Retail SE30xir
		SE50XIR	Matrix Retail SE50xir
ASCENT (A)	XER	A30XER	Matrix Retail A30xer
		A50XER	Matrix Retail A50xer
	XIR	A30XIR	Matrix Retail A30xir
		A50XIR	Matrix Retail A50xir
Climbmill (C)	XER	C50XER	Matrix Retail C50xer
	XIR	C50XIR	Matrix Retail C50xir
TREADMILL (T)	XER	TF30XER	Matrix Retail TF30xer
		TF50XER	Matrix Retail TF50xer
		T50XER	Matrix Retail T50xer
		T70XER	Matrix Retail T70xer
		T30XER	Matrix Retail T30xer
		T75XER	Matrix Retail T75xer
	XIR	TF30XIR	Matrix Retail TF30xir
		TF50XIR	Matrix Retail TF50xir
		T50XIR	Matrix Retail T50xir
		T70XIR	Matrix Retail T70xir
		T30XIR	Matrix Retail T30xir
		T75XIR	Matrix Retail T75xir

First Time Setup - Update



Update

Checking update

No Update available

Update available

Update Complete

First Time Setup vs Restore to Factory Defaults vs LCB Change Detection

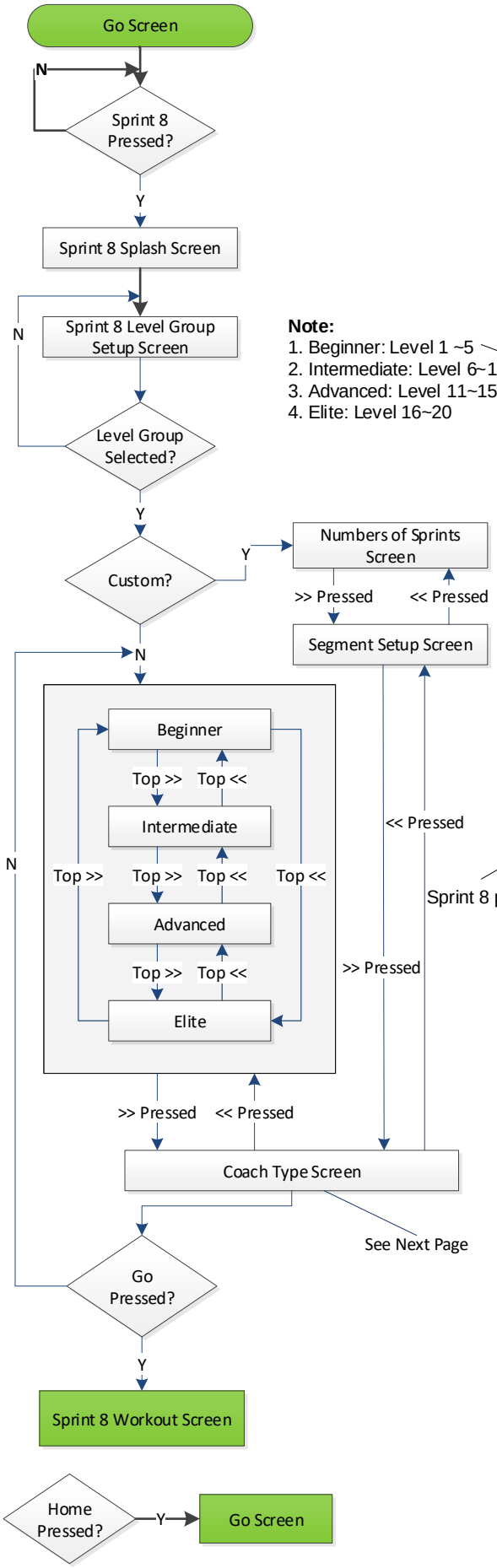
Note: These differences are subject to change.

First Time Setup (Setup Wizard): Activating this from Service/Engineering mode does not restore the console to factory defaults. All settings are left as they are currently configured and the user is sent through the First Time Setup where they are able to change those settings presented to them. This concludes with going to the Go Screen as opposed to User Setup.

Restore to Factory Defaults: Resets the console to defaults listed on the Factory Defaults page and sets the console to go into First Time Setup on boot. Concludes with going to First User Setup instead of the Go Screen. The PM would like this to replace the First Time Setup option entirely.

LCB Detection: If the consoles detects a different LCB than the one it is configured for it will restore itself to factory defaults and run First Time Setup. At the end of which the console goes to the Go Screen instead of the First User Setup. LCB Detection is likely intended to only be used by a service technician or tester moving consoles between frames. Ultimately, the SOP should be that when moving a console between frames the operator runs Restore to Factory Defaults on the current frame, but does not run through First Time Setup. This is because LCB Detection will not always detect a different LCB, additionally multiple frames use the same LCB type and so will not trigger this mechanism.

Sprint 8 Setup Screen

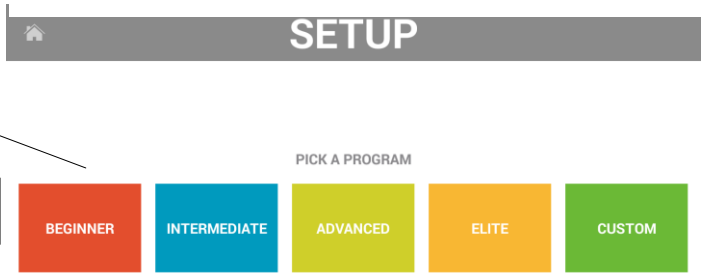


Note:
1. Beginner: Level 1 ~5
2. Intermediate: Level 6~10
3. Advanced: Level 11~15
4. Elite: Level 16~20

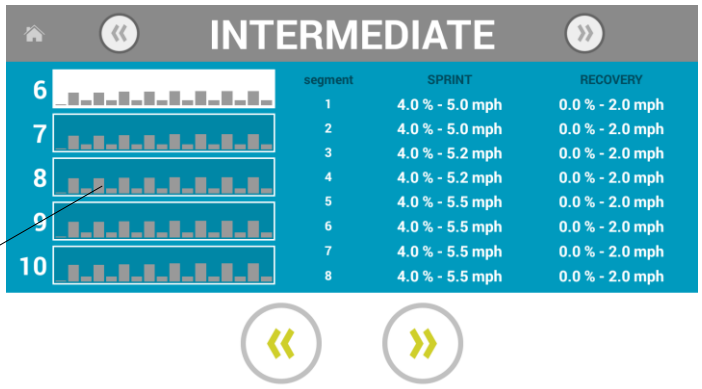
Sprint 8 profile screen

Sprint 8 Splash Screen

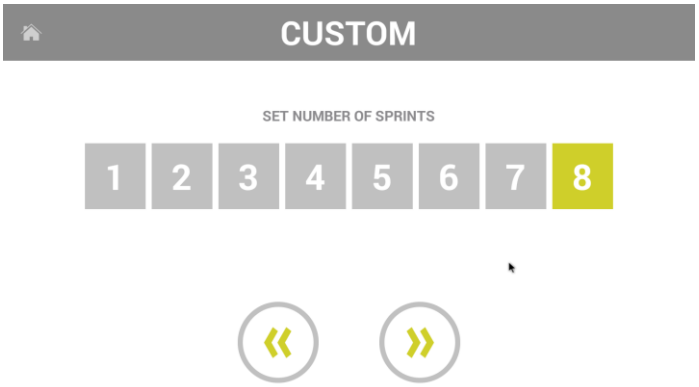
Sprint 8 Level Group Setup Screen



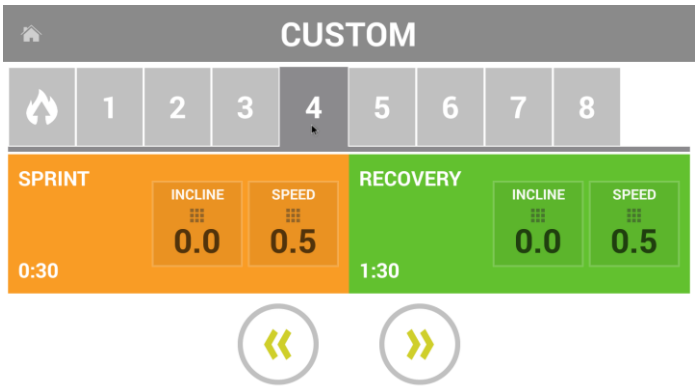
Sprint 8 Level Select Screen



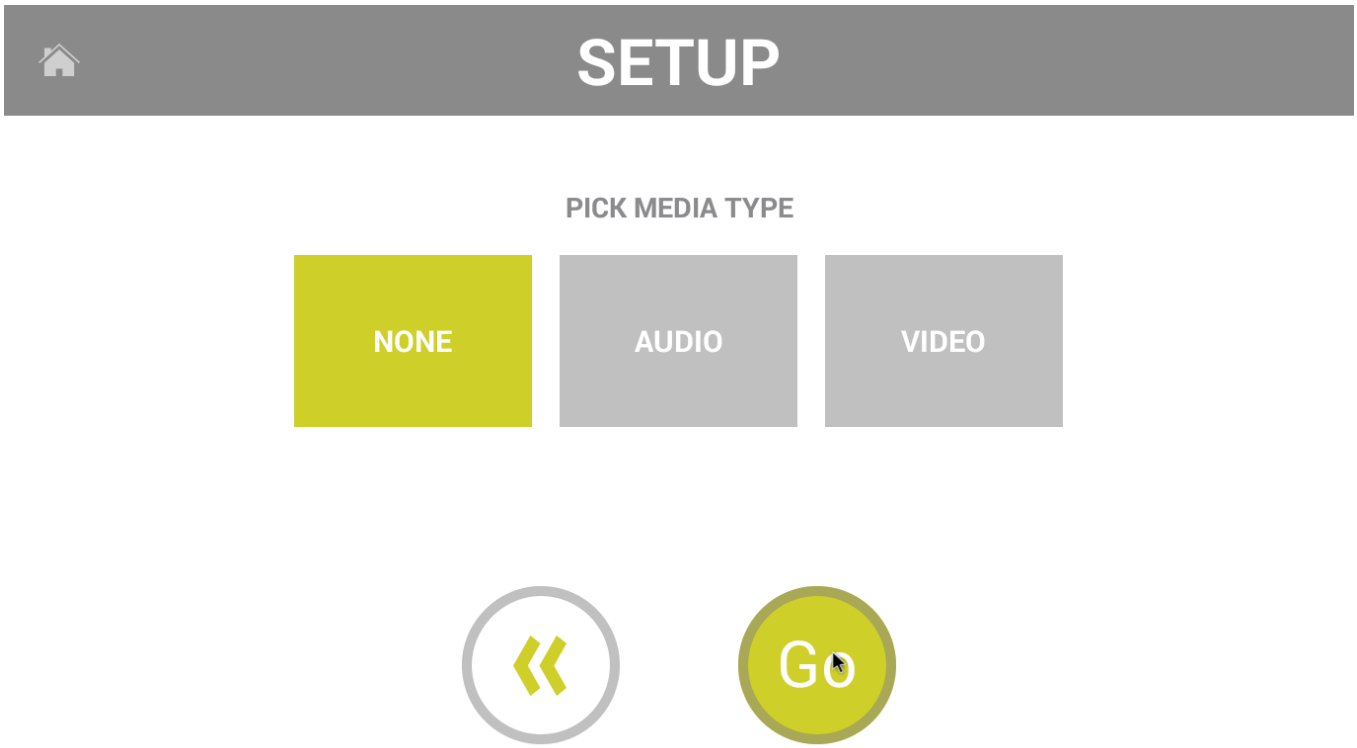
Sprint 8 Number of Sprints Screen



Sprint 8 Segment Setup Screen

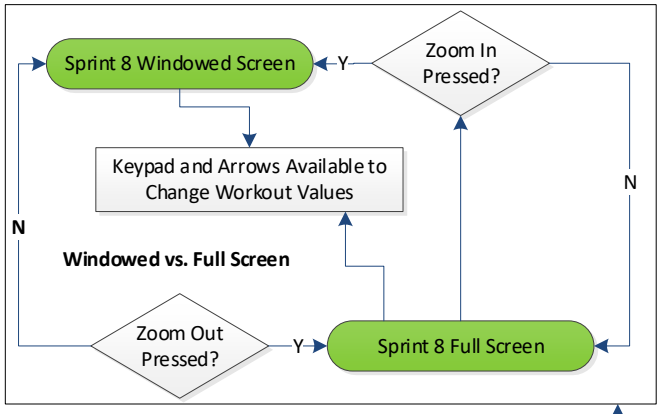


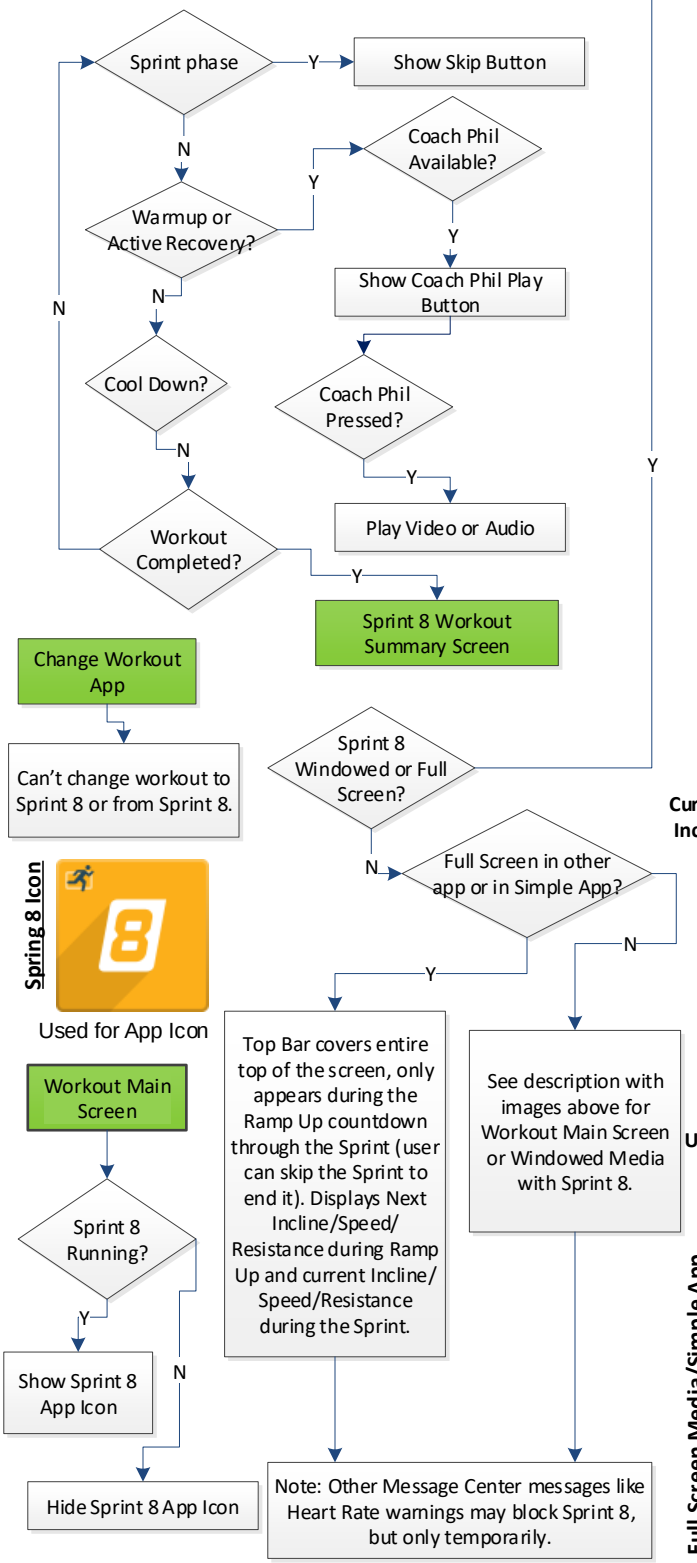
Sprint 8 Coach
Type Screen



None – No audio or video during recovery.
Audio – Only audio during recovery.
Video – Audio and video during recovery.

Sprint 8 Workout Screen





Text is 'Next Incline/Speed/Resistance' during Warm Up and Active Recovery, the value is the Incline/Speed/Resistance of the upcoming Sprint. Nothing is shown for this during the Sprint or Cool Down.

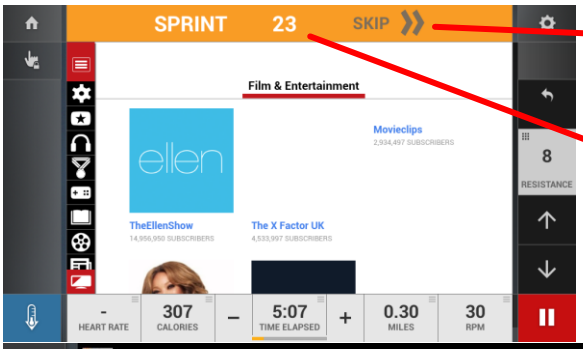
Virtual Active is not available during Sprint 8.

Workout Main Screen or Windowed Media with Sprint 8

Central text displays 'Sprint in' during Warm Up and Active Recovery, 'Ramping Up' during the Ramp Up phase, 'Sprint' during the Sprint and 'Workout Ends in' during Cool Down. Value is the time until the Sprint during Warm Up/Active Recovery/Ramp Up; time until the end of the Sprint during the Sprint; and the time until Cool Down ends during Cool Down.

Skip Sprint Button

Time Remaining



Sprint 8 Windowed Screen

Current Incline

Current Speed/ Resistance

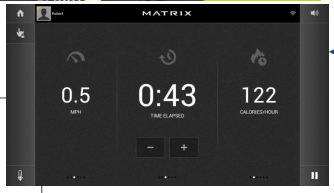
Upcoming Sprint Speed/ Resistance

Upcoming Sprint Incline

Sprint 8 Full Screen

Full Screen Media/Simple App with Sprint 8

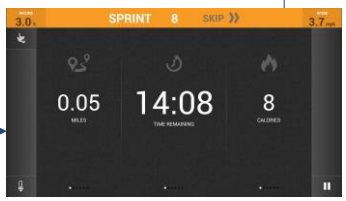
Ramp Up



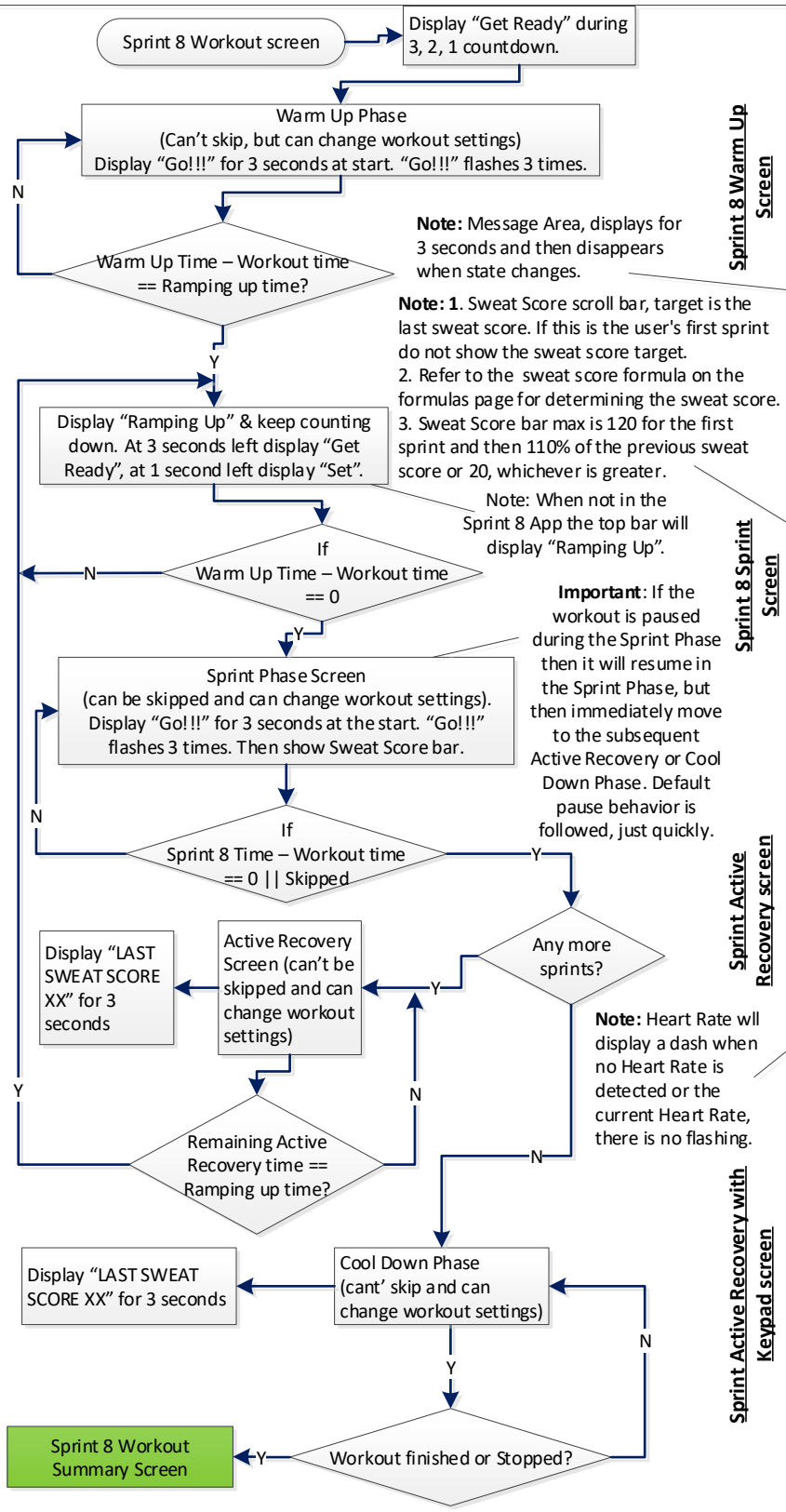
Warm Up
Active Recovery
Cool Down

Ramp Up

Sprint



Sprint 8 Workout Screen II



Note: Virtual Active is disabled when running a Sprint 8 workout.

Note: Message Area, displays for 3 seconds and then disappears when state changes.

Note: 1. Sweat Score scroll bar, target is the last sweat score. If this is the user's first sprint do not show the sweat score target.
2. Refer to the sweat score formula on the formulas page for determining the sweat score.
3. Sweat Score bar max is 120 for the first sprint and then 110% of the previous sweat score or 20, whichever is greater.

Note: When not in the Sprint 8 App the top bar will display "Ramping Up".

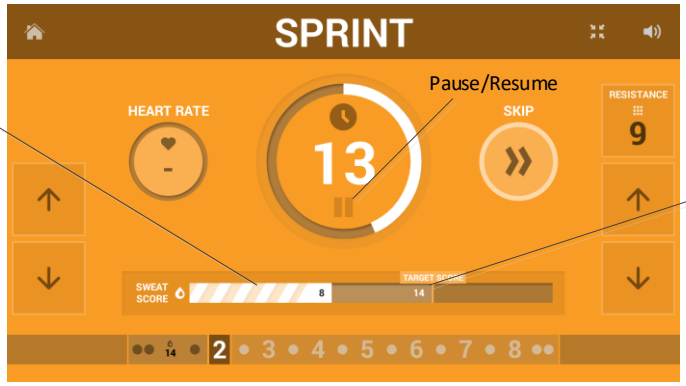
Important: If the workout is paused during the Sprint Phase then it will resume in the Sprint Phase, but then immediately move to the subsequent Active Recovery or Cool Down Phase. Default pause behavior is followed, just quickly.

Note: Heart Rate wll display a dash when no Heart Rate is detected or the current Heart Rate, there is no flashing.

1. Ramp up starts and finishes in Active Recovery/Warm Up (Sprint stage is at Sprint level the whole 30 seconds).
2. Incline/Speed/Resistance should complete ramping up at the same time and increase intensity at whatever the physical ramp up rate is. E.g., speed is 0.5MPH/sec. This means that if a machine has two parameters ramping up at the same time they can start at different times, but must finish at the same time.
3. The 'Ramping Up' countdown is the longest time it takes a parameter to reach Sprint intensity or 5 seconds whichever is longer.
Example: If it takes an Ascent 10 seconds to ramp up its incline and 1 second to ramp up its resistance then the incline will start changing with 10 seconds left in Active Recovery/Warm Up and the resistance will change at 1 second before the Sprint. The Ramp Up countdown will be 10 seconds.

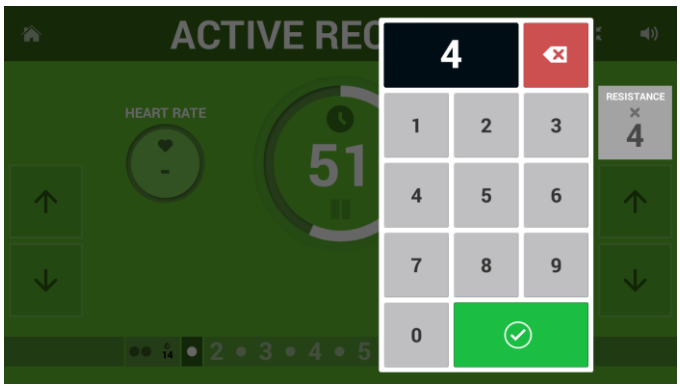
Sprint 8 Warm Up Screen

Sprint 8 Sprint Screen

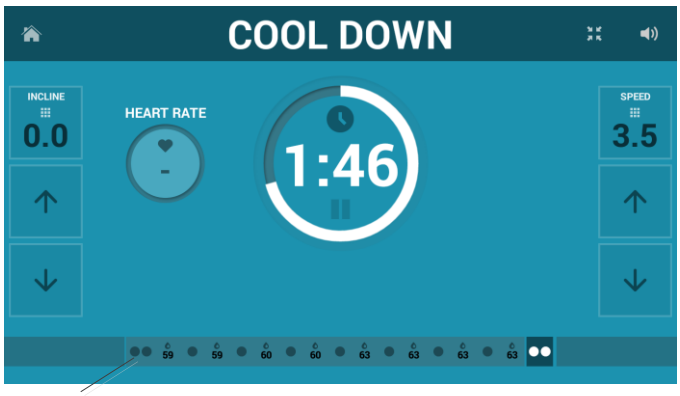


Sprint Active Recovery screen

Sprint Active Recovery with Keypad screen



Sprint Cool down screen



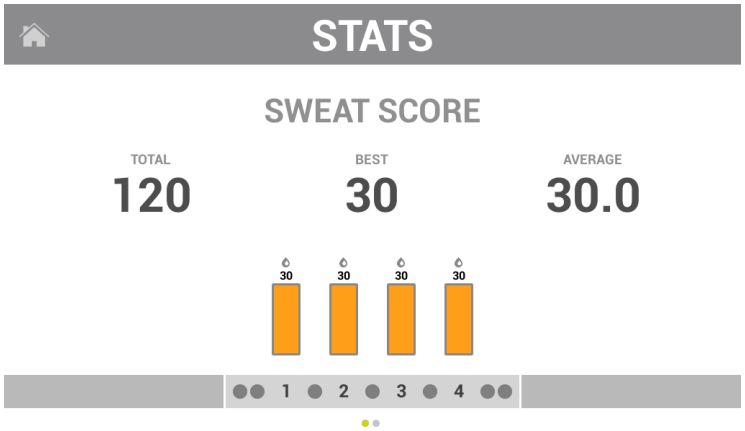
Note: Sprint State Bar, display sprint workout segment, the sweat score will replace the segment number after an individual sprint is completed.

Sprint 8 Workout Summary Screens

Workout Summary
Sweat Score

For all sweat score bar graphs the maximum is the user's highest sweat score for the workout. So the graphs fill as a % of the highest sweat score.

Total is the aggregate of all sweat scores.



Note: Best is the best sweat score and Average is the average of all the sweat scores displayed.

Page 1

Note: Transition between screens by swiping left or right.

	WARMUP +	WORKOUT +	COOL DOWN =	TOTAL
TIME ELAPSED	3:00	6:46	2:30	12:16
DISTANCE	0.17 mi	0.40 mi	0.14 mi	0.73 mi
CALORIES	180	406	150	736
AVERAGE PACE	16:40	16:40	16:40	16:40
AVERAGE SPEED	3.6 mph	3.6 mph	3.6 mph	3.6 mph
AVERAGE WATTS	95	100	94	97
AVERAGE METS	5.72	6.04	5.70	5.89
AVERAGE RPM	28	30	28	29
AVERAGE HEART RATE	0 bpm	0 bpm	0 bpm	0 bpm

Page 2

	WARMUP +	WORKOUT +	COOL DOWN =	TOTAL
TIME ELAPSED	3:00	6:46	2:30	12:16
DISTANCE	0.17 mi	0.40 mi	0.14 mi	0.73 mi
CALORIES	180	406	150	736
AVERAGE PACE	16:40	16:40	16:40	16:40
AVERAGE SPEED	3.6 mph	3.6 mph	3.6 mph	3.6 mph
AVERAGE WATTS	95	100	94	97
AVERAGE METS	5.72	6.04	5.70	5.89
AVERAGE RPM	28	30	28	29
AVERAGE HEART RATE	0 bpm	0 bpm	0 bpm	0 bpm

Connected Account

Non-Connected Account

Sprint 8 Workout Summary			
Data Points	**Treadmill**	**Ascent**	**URE**
Time Elapsed	x	x	x
Distance (Mi or Km)	x	x	x
Total Steps			
Total Floors			
Calories	x	x	x
Average Pace (Time per Mile)	x	x	x
Average Speed (MPH or KPH)	x	x	x
Average Steps per Minute			
Average Watts	x	x	x
Average METs	x	x	x
Average RPM		x	x
Average Heart Rate	x	x	x
Average Resistance		x	x
Peak Speed (MPH or KPH)	x	x	x
Peak Steps per Minute			
Peak Watts	x	x	x
Peak METs	x	x	x
Peak RPM		x	x
Peak Heart Rate	x	x	x
Peak Incline	x	x	
Peak Resistance		x	x
Elevation	x		
S8 Sprint Segments Completed	x	x	x
S8 Active Recovery Segments Completed	x	x	x
S8 Average Sweat Score (joules)	x	x	x
S8 Peak Sweat Score (joules)	x	x	x
Fitness Test Result			
Split #	x	x	x
Split Time	x	x	x
Split Distance	x	x	x
Total Laps (400 M/.25 mi)	x	x	x
Best (Lap) Time	x	x	x

What should show up in workout summary for each frame (must create splits in the track app to get splits). Note: 30-Series frames will not list Watts (average, peak).

Sprint 8 Chart – TM
Speed = MPH, Time = Seconds, Incline = % Grade

Sprint 8																			
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Speed	0.5	3.2	1.5	3.2	1.5	3.5	1.5	3.5	1.5	3.7	1.5	3.7	1.5	3.7	1.5	3.7	1.5
	Incline	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Level 2	Speed	0.5	3.7	1.5	3.7	1.5	4.0	1.5	4.0	1.5	4.2	1.5	4.2	1.5	4.2	1.5	4.2	1.5
	Incline	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Level 3	Speed	0.5	4.2	1.5	4.2	1.5	4.4	1.5	4.4	1.5	4.6	1.5	4.6	1.5	4.6	1.5	4.6	1.5
	Incline	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Level 4	Speed	0.5	4.6	1.5	4.6	1.5	4.8	1.5	4.8	1.5	5.0	1.5	5.0	1.5	5.0	1.5	5.0	1.5
	Incline	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Level 5	Speed	0.5	4.9	1.5	4.9	1.5	5.1	1.5	5.1	1.5	5.3	1.5	5.3	1.5	5.3	1.5	5.3	1.5
	Incline	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Level 6	Speed	0.5	5.0	2.0	5.0	2.0	5.2	2.0	5.2	2.0	5.5	2.0	5.5	2.0	5.5	2.0	5.5	2.0
	Incline	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0
Level 7	Speed	0.5	5.3	2.0	5.3	2.0	5.5	2.0	5.5	2.0	5.8	2.0	5.8	2.0	5.8	2.0	5.8	2.0
	Incline	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0
Level 8	Speed	0.5	5.8	2.0	5.8	2.0	6.0	2.0	6.0	2.0	6.3	2.0	6.3	2.0	6.3	2.0	6.3	2.0
	Incline	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0
Level 9	Speed	0.5	6.0	2.0	6.0	2.0	6.3	2.0	6.3	2.0	6.5	2.0	6.5	2.0	6.5	2.0	6.5	2.0
	Incline	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0
Level 10	Speed	0.5	6.5	2.0	6.5	2.0	6.7	2.0	6.7	2.0	7.0	2.0	7.0	2.0	7.0	2.0	7.0	2.0
	Incline	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0
Level 11	Speed	0.5	7.0	2.5	7.0	2.5	7.2	2.5	7.2	2.5	7.5	2.5	7.5	2.5	7.5	2.5	7.5	2.5
	Incline	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0
Level 12	Speed	0.5	7.5	2.5	7.5	2.5	7.7	2.5	7.7	2.5	8.0	2.5	8.0	2.5	8.0	2.5	8.0	2.5
	Incline	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0
Level 13	Speed	0.5	8.0	2.5	8.0	2.5	8.2	2.5	8.2	2.5	8.5	2.5	8.5	2.5	8.5	2.5	8.5	2.5
	Incline	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0
Level 14	Speed	0.5	8.5	2.5	8.5	2.5	8.7	2.5	8.7	2.5	9.0	2.5	9.0	2.5	9.0	2.5	9.0	2.5
	Incline	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0
Level 15	Speed	0.5	9.0	2.5	9.0	2.5	9.2	2.5	9.2	2.5	9.5	2.5	9.5	2.5	9.5	2.5	9.5	2.5
	Incline	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0	5.0	0.0
Level 16	Speed	0.5	9.5	3.0	9.5	3.0	9.7	3.0	9.7	3.0	10.0	3.0	10.0	3.0	10.0	3.0	10.0	3.0
	Incline	0.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0
Level 17	Speed	0.5	10.0	3.0	10.0	3.0	10.2	3.0	10.2	3.0	10.5	3.0	10.5	3.0	10.5	3.0	10.5	3.0
	Incline	0.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0
Level 18	Speed	0.5	10.5	3.0	10.5	3.0	10.7	3.0	10.7	3.0	11.0	3.0	11.0	3.0	11.0	3.0	11.0	3.0
	Incline	0.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0
Level 19	Speed	0.5	11.0	3.0	11.0	3.0	11.2	3.0	11.2	3.0	11.5	3.0	11.5	3.0	11.5	3.0	11.5	3.0
	Incline	0.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0
Level 20	Speed	0.5	11.5	6.0	11.5	6.0	11.7	6.0	11.7	6.0	12.0	6.0	12.0	6.0	12.0	6.0	12.0	6.0
	Incline	0.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0	2.0

Sprint 8 Chart – HUR 50 Series (Induction Brake)
Resistance = Level, Time = Seconds

Sprint 8																		
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Resistance	1	3	1	3	1	4	1	4	1	6	1	6	1	6	1	6	1
Level 2	Resistance	1	4	1	4	1	5	1	5	1	7	1	7	1	7	1	7	1
Level 3	Resistance	1	5	1	5	1	6	1	6	1	8	1	8	1	8	1	8	1
Level 4	Resistance	1	6	1	6	1	7	1	7	1	9	1	9	1	9	1	9	1
Level 5	Resistance	1	7	1	7	1	8	1	8	1	10	1	10	1	10	1	10	1
Level 6	Resistance	2	8	2	8	2	9	2	9	2	11	2	11	2	11	2	11	2
Level 7	Resistance	2	9	2	9	2	10	2	10	2	12	2	12	2	12	2	12	2
Level 8	Resistance	2	10	2	10	2	11	2	11	2	13	2	13	2	13	2	13	2
Level 9	Resistance	2	11	2	11	2	12	2	12	2	14	2	14	2	14	2	14	2
Level 10	Resistance	2	12	2	12	2	13	2	13	2	15	2	15	2	15	2	15	2
Level 11	Resistance	2	13	2	13	2	14	2	14	2	16	2	16	2	16	2	16	2
Level 12	Resistance	2	14	2	14	2	15	2	15	2	17	2	17	2	17	2	17	2
Level 13	Resistance	2	15	2	15	2	16	2	16	2	18	2	18	2	18	2	18	2
Level 14	Resistance	2	16	2	16	2	17	2	17	2	19	2	19	2	19	2	19	2
Level 15	Resistance	2	17	2	17	2	18	2	18	2	20	2	20	2	20	2	20	2
Level 16	Resistance	3	18	3	18	3	19	3	19	3	21	3	21	3	21	3	21	3
Level 17	Resistance	3	19	3	19	3	20	3	20	3	22	3	22	3	22	3	22	3
Level 18	Resistance	3	20	3	20	3	21	3	21	3	23	3	23	3	23	3	23	3
Level 19	Resistance	3	21	3	21	3	22	3	22	3	24	3	24	3	24	3	24	3
Level 20	Resistance	3	22	3	22	3	23	3	23	3	25	3	25	3	25	3	25	3

Sprint 8 Chart – HUR 30 Series (Eddy Current Brake)
Resistance = Level, Time = Seconds

Sprint 8																		
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Resistance	1	2	1	2	1	3	1	3	1	4	1	4	1	4	1	4	1
Level 2	Resistance	1	3	1	3	1	4	1	4	1	5	1	5	1	5	1	5	1
Level 3	Resistance	1	4	1	4	1	5	1	5	1	6	1	6	1	6	1	6	1
Level 4	Resistance	1	5	1	5	1	6	1	6	1	7	1	7	1	7	1	7	1
Level 5	Resistance	1	6	1	6	1	7	1	7	1	8	1	8	1	8	1	8	1
Level 6	Resistance	2	6	2	6	2	7	2	7	2	8	2	8	2	8	2	8	2
Level 7	Resistance	2	7	2	7	2	8	2	8	2	9	2	9	2	9	2	9	2
Level 8	Resistance	2	8	2	8	2	9	2	9	2	10	2	10	2	10	2	10	2
Level 9	Resistance	2	8	2	8	2	9	2	9	2	10	2	10	2	11	2	11	2
Level 10	Resistance	2	9	2	9	2	10	2	10	2	11	2	11	2	11	2	11	2
Level 11	Resistance	2	10	2	10	2	11	2	11	2	12	2	12	2	12	2	12	2
Level 12	Resistance	2	11	2	11	2	12	2	12	2	12	2	13	2	13	2	13	2
Level 13	Resistance	2	12	2	12	2	13	2	13	2	13	2	14	2	14	2	14	2
Level 14	Resistance	2	13	2	13	2	14	2	14	2	14	2	15	2	15	2	15	2
Level 15	Resistance	2	14	2	14	2	15	2	15	2	15	2	16	2	16	2	16	2
Level 16	Resistance	3	14	3	14	3	15	3	15	3	16	3	16	3	16	3	16	3
Level 17	Resistance	3	15	3	15	3	16	3	16	3	17	3	17	3	17	3	17	3
Level 18	Resistance	3	16	3	16	3	17	3	17	3	18	3	18	3	18	3	18	3
Level 19	Resistance	3	17	3	17	3	18	3	18	3	19	3	19	3	19	3	19	3
Level 20	Resistance	3	18	3	18	3	19	3	19	3	20	3	20	3	20	3	20	3

Sprint 8 Chart – Ascent 50 Series (Induction Brake)
Resistance = Level, Time = Seconds, Incline = % of 100

Sprint 8																		
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Resistance	1	3	1	3	1	4	1	4	1	6	1	6	1	6	1	6	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 2	Resistance	1	4	1	4	1	5	1	5	1	7	1	7	1	7	1	7	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 3	Resistance	1	5	1	5	1	6	1	6	1	8	1	8	1	8	1	8	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 4	Resistance	1	6	1	6	1	7	1	7	1	9	1	9	1	9	1	9	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 5	Resistance	1	7	1	7	1	8	1	8	1	10	1	10	1	10	1	10	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 6	Resistance	2	8	2	8	2	9	2	9	2	11	2	11	2	11	2	11	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 7	Resistance	2	9	2	9	2	10	2	10	2	12	2	12	2	12	2	12	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 8	Resistance	2	10	2	10	2	11	2	11	2	13	2	13	2	13	2	13	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 9	Resistance	2	11	2	11	2	12	2	12	2	14	2	14	2	14	2	14	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 10	Resistance	2	12	2	12	2	13	2	13	2	15	2	15	2	15	2	15	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 11	Resistance	2	13	2	13	2	14	2	14	2	16	2	16	2	16	2	16	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 12	Resistance	2	14	2	14	2	15	2	15	2	17	2	17	2	17	2	17	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 13	Resistance	2	15	2	15	2	16	2	16	2	18	2	18	2	18	2	18	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 14	Resistance	2	16	2	16	2	17	2	17	2	19	2	19	2	19	2	19	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 15	Resistance	2	17	2	17	2	18	2	18	2	20	2	20	2	20	2	20	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 16	Resistance	3	18	3	18	3	19	3	19	3	21	3	21	3	21	3	21	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 17	Resistance	3	19	3	19	3	20	3	20	3	22	3	22	3	22	3	22	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 18	Resistance	3	20	3	20	3	21	3	21	3	23	3	23	3	23	3	23	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 19	Resistance	3	21	3	21	3	22	3	22	3	24	3	24	3	24	3	24	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 20	Resistance	3	22	3	22	3	23	3	23	3	25	3	25	3	25	3	25	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0

Sprint 8 Chart – Ascent 30 Series (Eddy Current Brake)
Resistance = Level, Time = Seconds, Incline = % of 100

Sprint 8																			
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Resistance	1	2	1	2	1	2	1	2	1	3	1	3	1	3	1	3	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 2	Resistance	1	2	1	2	1	3	1	3	1	4	1	4	1	4	1	4	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 3	Resistance	1	3	1	3	1	4	1	4	1	5	1	5	1	5	1	5	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 4	Resistance	1	4	1	4	1	5	1	5	1	6	1	6	1	6	1	6	1
	Incline	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0	30	0
Level 5	Resistance	1	4	1	4	1	5	1	5	1	6	1	6	1	6	1	6	1
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 6	Resistance	2	5	2	5	2	6	2	6	2	6	2	6	2	6	2	6	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 7	Resistance	2	6	2	6	2	6	2	6	2	7	2	7	2	7	2	7	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 8	Resistance	2	6	2	6	2	7	2	7	2	8	2	8	2	8	2	8	2
	Incline	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0	40	0
Level 9	Resistance	2	6	2	6	2	7	2	7	2	8	2	8	2	8	2	8	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 10	Resistance	2	7	2	7	2	8	2	8	2	9	2	9	2	9	2	9	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 11	Resistance	2	8	2	8	2	9	2	9	2	10	2	10	2	10	2	10	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 12	Resistance	2	9	2	9	2	10	2	10	2	10	2	10	2	10	2	10	2
	Incline	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
Level 13	Resistance	2	9	2	9	2	10	2	10	2	10	2	10	2	10	2	10	2
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 14	Resistance	2	10	2	10	2	10	2	10	2	11	2	11	2	11	2	11	2
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 15	Resistance	2	11	2	11	2	12	2	12	2	13	2	13	2	13	2	13	2
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 16	Resistance	3	11	3	11	3	12	3	12	3	13	3	13	3	13	3	13	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 17	Resistance	3	12	3	12	3	13	3	13	3	14	3	14	3	14	3	14	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 18	Resistance	3	13	3	13	3	14	3	14	3	14	3	14	3	14	3	14	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 19	Resistance	3	14	3	14	3	14	3	14	3	15	3	15	3	15	3	15	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0
Level 20	Resistance	3	14	3	14	3	15	3	15	3	16	3	16	3	16	3	16	3
	Incline	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0

Sprint 8 Chart – Elliptical 50 Series (Induction Brake)
Resistance = Level, Time = Seconds

Sprint 8																			
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Resistance	1	3	1	3	1	4	1	4	1	6	1	6	1	6	1	6	1
Level 2	Resistance	1	4	1	4	1	5	1	5	1	7	1	7	1	7	1	7	1
Level 3	Resistance	1	5	1	5	1	6	1	6	1	8	1	8	1	8	1	8	1
Level 4	Resistance	1	6	1	6	1	7	1	7	1	9	1	9	1	9	1	9	1
Level 5	Resistance	1	7	1	7	1	8	1	8	1	10	1	10	1	10	1	10	1
Level 6	Resistance	2	8	2	8	2	9	2	9	2	11	2	11	2	11	2	11	2
Level 7	Resistance	2	9	2	9	2	10	2	10	2	12	2	12	2	12	2	12	2
Level 8	Resistance	2	10	2	10	2	11	2	11	2	13	2	13	2	13	2	13	2
Level 9	Resistance	2	11	2	11	2	12	2	12	2	14	2	14	2	14	2	14	2
Level 10	Resistance	2	12	2	12	2	13	2	13	2	15	2	15	2	15	2	15	2
Level 11	Resistance	2	13	2	13	2	14	2	14	2	16	2	16	2	16	2	16	2
Level 12	Resistance	2	14	2	14	2	15	2	15	2	17	2	17	2	17	2	17	2
Level 13	Resistance	2	15	2	15	2	16	2	16	2	18	2	18	2	18	2	18	2
Level 14	Resistance	2	16	2	16	2	17	2	17	2	19	2	19	2	19	2	19	2
Level 15	Resistance	2	17	2	17	2	18	2	18	2	20	2	20	2	20	2	20	2
Level 16	Resistance	3	18	3	18	3	19	3	19	3	21	3	21	3	21	3	21	3
Level 17	Resistance	3	19	3	19	3	20	3	20	3	22	3	22	3	22	3	22	3
Level 18	Resistance	3	20	3	20	3	21	3	21	3	23	3	23	3	23	3	23	3
Level 19	Resistance	3	21	3	21	3	22	3	22	3	24	3	24	3	24	3	24	3
Level 20	Resistance	3	22	3	22	3	23	3	23	3	25	3	25	3	25	3	25	3

Sprint 8 Chart – Elliptical 30 Series (Eddy Current Brake)
Resistance = Level, Time = Seconds

Sprint 8																		
	Time	180 (Warm up)	30	90	30	90	30	90	30	90	30	90	30	90	30	90	30	150 (Cool Down)
Level 1	Resistance	1	2	1	2	1	3	1	3	1	4	1	4	1	4	1	4	1
Level 2	Resistance	1	3	1	3	1	4	1	4	1	5	1	5	1	5	1	5	1
Level 3	Resistance	1	4	1	4	1	5	1	5	1	6	1	6	1	6	1	6	1
Level 4	Resistance	1	5	1	5	1	6	1	6	1	7	1	7	1	7	1	7	1
Level 5	Resistance	1	6	1	6	1	7	1	7	1	8	1	8	1	8	1	8	1
Level 6	Resistance	2	6	2	6	2	7	2	7	2	8	2	8	2	8	2	8	2
Level 7	Resistance	2	7	2	7	2	8	2	8	2	9	2	9	2	9	2	9	2
Level 8	Resistance	2	8	2	8	2	9	2	9	2	10	2	10	2	10	2	10	2
Level 9	Resistance	2	8	2	8	2	9	2	9	2	10	2	10	2	11	2	11	2
Level 10	Resistance	2	9	2	9	2	10	2	10	2	11	2	11	2	11	2	11	2
Level 11	Resistance	2	10	2	10	2	11	2	11	2	12	2	12	2	12	2	12	2
Level 12	Resistance	2	11	2	11	2	12	2	12	2	12	2	13	2	13	2	13	2
Level 13	Resistance	2	12	2	12	2	13	2	13	2	13	2	14	2	14	2	14	2
Level 14	Resistance	2	13	2	13	2	14	2	14	2	14	2	15	2	15	2	15	2
Level 15	Resistance	2	14	2	14	2	15	2	15	2	15	2	16	2	16	2	16	2
Level 16	Resistance	3	14	3	14	3	15	3	15	3	16	3	16	3	16	3	16	3
Level 17	Resistance	3	15	3	15	3	16	3	16	3	17	3	17	3	17	3	17	3
Level 18	Resistance	3	16	3	16	3	17	3	17	3	18	3	18	3	18	3	18	3
Level 19	Resistance	3	17	3	17	3	18	3	18	3	19	3	19	3	19	3	19	3
Level 20	Resistance	3	18	3	18	3	19	3	19	3	20	3	20	3	20	3	20	3

 Note: Access by tapping 'Machine Settings' from the onscreen settings menu.

Note: Access by tapping 'Machine Settings' from the onscreen settings menu.

Machine Settings					
Category	Name	Models	Default	Range	Units
General	Accumulated Time	TACEUR	0.00	-	Hours
	Accumulated Distance	TAEUR	0.00	-	Miles/Km
	Floors Climbed	C	0	-	Floors
	Time Zone	TACEUR	Central Time	-	-
	Date	TACEUR	RTC Date	2000-2036/01-12/01-31	-
	Time	TACEUR	RTC Time	00-23:00-59:00-59	12hr/24hr
	Time Format	TACEUR	12 Hour	12 Hour, 24 Hour	-
	Language Setup	TACEUR	English (U.S.)	See Languages Table	-
	Software Versions	TACEUR	-	System Version, Software Updater, Native Libraries, Main Apps, 3rd Party Apps, Media Files, Sprint 8, Keyboard Apps, Bluetooth Firmware	Major.Minor.Build.Revision
	Firmware Versions	TACEUR	-	OS Version (from Manufacturer), IO Version, LCB Type, LCB Version	-
Update	Automatic Update	TACEUR	Check	Check/No Check	-
	Update From USB	TACEUR	Update From USB	Update From USB/Install	-
	Check For Updates	TACEUR	Check For Updates	Check For Updates/Install	-
	Available Updates	TACEUR	-	Software Updater, Native Libraries, Main Apps, 3rd Party Apps, Media Files, Sprint 8, Keyboard Apps, Bluetooth Firmware	Major.Minor.Build.Revision
Restore Factory Defaults Always available, not in it's own tab.	Restore Factory Defaults	TACEUR	-	-	-
Network Setup	Wifi Mac Address	TACEUR	Hardware Specified	0.0.0.0.0.0 - 255.255.255.255.255.255	Byte.Byte.Byte.Byte.Byte.Byte In Hex
	Wifi Setup	TACEUR	-	-	-
Network Setup (Wifi Setup)	Available Wireless Networks	TACEUR	-	Wireless networks in range with 'Other Network' always shown at the bottom of the list in order for the user to specify their own network.	If the user selects 'Other Network' they should be prompted to enter the Network Name, Password and the security protocol from None, WEP, WPA, WPA2, WPAPSK, WPA2PSK. If the user selects the network the console is currently connected to (indicated by a different colored Wifi symbol) they should be prompted with the option to forget the settings for that network.
Weather Note: Units (Fahrenheit/Imperial vs. Celsius/Metric) are determined by language - region. If a user authenticates using xID, the units will respect the preferred units as set in the	Enable Alerts	TACEUR	Check	Check/No Check	-
	Refresh	TACEUR	-	-	-
	Default City	TACEUR	Current Location which is determined by either the location stored in the console or the IP Address of the console if a location has not been set.	-	GPS Coordinates Note: May or may not display a location other than GPS coordinates. This is an issue with Bing as opposed to the web app.
Applications	Application Setup	TACEUR	Show all available apps	Move, Hide/Make Inactive, Locked	-
Hardware	Backlight Brightness	TACEUR	100	0-100	-
	Master Volume	TACEUR	5	0-30	-
	Key and Workout Countdown Volume	TACEUR	3	1-5	-
	Play Key Sound	TACEUR	Check	Check/No Check	-
	Play Workout Countdown Sound	TACEUR	Check	Check/No Check	-
	Energy Saver	TACEUR	Check	Check/No Check	-
	Promotional Video	TACEUR	Check	Check/No Check	-
	Energy Saver Timeout	TACEUR	30	1-60	Minutes
	Accumulated Distance Since Belt Was Last Lubed	T (TF30, TF50, T50)	0	-	Miles/Km
	Reset	T (TF30, TF50, T50)	-	-	-
	Hours Since Chain Was Last Lubed	C	0.00	-	Hours
	Reset	C	-	-	-
	Display Test	TACEUR	-	-	-

Note: If the user manually inputs a new date. The new date becomes the default date when the user selects Restore Factory Defaults.

Service Mode > Spec

Note: Access by holding the physical buttons Incline Up + Speed Down on Treadmills, Speed Up + Speed Down on Ellipticals, and Resistance Up + Resistance Down on AUBE for 5 seconds on the Welcome Screen.
Screen Calibration can further be accessed by holding the physical buttons Incline Up + Speed Down on Treadmills, Speed Up + Speed Down on Ellipticals, and Resistance Up + Resistance Down on AUBE for 5 seconds on the Service Mode Screen.

Service Mode					
Category	Name	Modes	Default	Range	Units	Comments
General	Screen Timeout	TACEUX	120	15, 30, 60, 90, 120, Never	Seconds	Dropdown list. Affects those screens that go to from the Main Screen after a defined time (Manual Setup Screen, Workout Summary Screen, Error Screen, Maintenance Screen, Machine Settings, Service Mode and Engineering Mode which do not timeout)
	Accumulated Time	TACEUX	0:00	0:00 - 9999:59	Hours	Read Only
	Accumulated Distance	TACEUX	0.00	0.00 - 999,999,999.99	Miles	Read Only
	Floors Climbed	C	0	0 - 2147483647	Floors	Read Only
	Serial Number - Console	TACEUX	-	AYR, KVR	Consoles	Read Only. Consoles with the frame number to create a machine serial number. Format is Year + Week. Example: FrameCounter. e.g. KVR04
	Serial Number - Frame	TACEUX	-	ASE, ASG, ARE, ARG, RSE, RSG, ARE, ARG, RSE, RSG, TFE, TFG	Frames	This combines with the console number to create a machine serial number. Format is Year + Week. Example: FrameCounter. e.g. KVR04
	Time Zone	TACEUX	Central Time	-	-	Time zone to be used when calculating Sunrise/Sunset.
	Date	TACEUX	RTC Date	yyyy.mm.dd.hh.mm.ss	-	Enter using Keypad. Dynamic.
	Time	TACEUX	RTC Time	00:00:00 - 23:59:59	12hs/24hr	Keypad. Dynamic.
	Time Format	TACEUX	12 hour	12 hour, Unique	-	Keypad.
	Language Group	TACEUX	English (US)	Non-Unique, Unique	-	Screenshot list.
	Software Versions	TACEUX	-	Main Board, Motor Board, Upgrade, Native Libraries, Main Apps, 3rd Party Apps, Widgets, Sprint 8 Keyboard Apps, Bluetooth Firmware	-	Read Only. Current software, pulled from the update package manifest.
	Firmware Versions	TACEUX	-	Motor Board, Motor Board, CD Team, CD Team_Ext	Major.Minor Build Revision	Read Only. Current firmware, pulled from the hardware.
	DMX Environment	TACEUX	Production	Dev, QA, Staging, Production	-	Indicates what server (URL) the machine should use for web-connected services (workout tracking, web apps, asset management, OAPI).
Workout	Keyboard Disable Threshold	T	2.00MPH/5.30PH	Machine Minimum - 6.0MPH/9.6KPH	MPH/KPH	Determines the speed at which the keyboard is disabled or re-enabled. Machine minimum will differ based on the model: 0.5MPH, 0.8KPH for 0.5MPH/0.8KPH.
	Maximum Workout Time	TACEUX	120	10-120	Minutes	-
	Maximum Workout Calories	TACEUX	1000	50-1000	Calories	For gym workouts.
	Maximum Workout Distance	TACEUX	31.0MI/50.0KM	240MI/386.2KM (0.1MI/0.1KM) - 31.0MI/50.0KM	Miles/Km	For gym workouts.
	Maximum Workout Floors	C	150	15-300	Floors	For gym workouts.
	Maximum Level	C	25	10-30	-	For gym workouts. Landmarks is exempt from this setting. Levels should match the landmark even if it goes above the maximum. Set to 30 if unlimited. Machine Manufacturer allowable Resistance/Incline Limits are still enforced manually by a user until automatically by a firmware update.
	5 Step Enable	C	Check	Check/No Check	-	Not all Contents have a Control Zone so this can be disabled.
	5 Step Sensitivity	C	100	4-400	-	Sets the threshold of the Control Zone at which it triggers.
	Pause Time	TACEUX	5	1-10	Minutes	Now: The timer should start at the machine minimum speed when entering pause. The timer should stop at a level of zero.
	Maximum Speed	T	12.0MPH/20.0KPH	5.5 Machine Min MPH/5.0 Machine Max KPH	MPH/KPH	Our Commercial Treadmill Machines +2.0MPH/3.2KPH. For Retail Machine Max = Machine Max.
	Start Speed	T	Machine Minimum	Machine Minimum - 3.0MPH/Machine Minimum - 2.0KPH	MPH/KPH	Retail Machines will depend on information from the Motor Board. Commercial Can be 0.5 (0.8KPH) / 1.0 (1.6KPH). This sets the maximum speed during workout setup and the speed that the belt will start at if the user does not first adjust it.
	Maximum Incline	TA	15.0%	15.0-15.0	15% Grade	-
	Cool Down Time	TACEUX	5	1-20	Minutes	Maximum time a user can increase the cool down time in the Workout Setup Adjustment Time. Cool Down Time.
	Maximum Cool Down Adjustment Time	TACEUX	5	1-20	Minutes	Maximum time a user can increase the cool down time. = Maximum Cool Down Adjustment Time. Cool Down Time.
Setup Default	Age	TACEUX	30	14-90	Years	-
	Weight	TACEUX	150lbs/68kg	75lbs/34kg (0.5MI/0.5KM) - 375lbs/170.0kg (0.5MI/0.5KM) - 400lbs/181.0kg (1MI/1KM) - 500lbs/226.8kg (1MI/1KM) - 1000lbs/453.6kg (1MI/1KM) - 1500lbs/680.4kg (1MI/1KM) - 2000lbs/907.2kg (1MI/1KM) - 2500lbs/1134.0kg (1MI/1KM) - 3000lbs/1360.8kg (1MI/1KM) - 3500lbs/1587.6kg (1MI/1KM) - 4000lbs/1814.4kg (1MI/1KM) - 4500lbs/2041.2kg (1MI/1KM) - 5000lbs/2268.0kg	lbs/kg	-
	Gender	TACEUX	Male	-	-	-
	Default Workout Time	TACEUX	30	5-Max	Minutes	For Max See Workout Category.
	Default Workout Calories	TACEUX	200	50-Max	Calories	For Max See Workout Category. For gym workouts.
	Default Workout Distance	TACEUX	3.0MI/4.8KM	0.60MI/1.0KM - Max	Miles/Km	For Max See Workout Category. For gym workouts.
	Default Workout Floors	C	20	15-Max	Floors	For Max See Workout Category. For gym workouts.
Update	Automatic Update	TACEUX	Check	Check/No Check	-	If Automatic Update is checked the console checks for updates every 24 hours. If it has been more than 24 hours since the last check, if an update is available it generates Downloads 1. When all update files are downloaded the console waits for the next reboot. If the console reboots when the console goes into Energy Saver or Deep Sleep, it will not count as a reboot. Once a reboot is detected, if the user powers down the console it will install the update when it powers back on.
	Update From USB	TACEUX	Update From USB	Update From USB/Install	-	Check USB drive for updates. If updates are found they will be listed on the screen and enable the button will Display Install.
	Check For Updates	TACEUX	Check For Updates	Check For Updates/Install	-	Check OAPI server for updates. If updates are found they will be listed on the screen and enable Update and the button will display Install.
	Available Updates	TACEUX	-	Software Updates, Native Libraries, Main Apps, 3rd Party Apps, Widgets, Sprint 8 Keyboard Apps, Bluetooth Firmware	Major.Minor Build Revision	List packages that have updates available and their version.
Restore Factory Defaults (Always available on user-side)	Restore Factory Defaults	TACEUX	-	-	-	Resets various options, counters, and configuration values to defaults given in the Factory Defaults Table. See the Factory Defaults Table for a list of options and values. Does not affect the Time Setup and will not touch NPT.
Network Setup	WiFi Mac Address	TACEUX	-	hardware Specified	-	Read Only. Mac address pulled from the installed hardware. Read Only. should not show if no WiFi hardware is installed.
	WiFi Setup	TACEUX	-	0.0.0.0:0.0 - 255.255.255.255:255.255	Byte.Byte.Byte.Byte:Byte.Byte	Read Only. Shows the current IP address and port. Shows 0.0.0.0:0 if no active link.
Network Setup (WiFi Setup)	Available Wireless Networks	TACEUX	-	-	-	Follows the same look and feel as the Wireless Setup for the WiFi setup. Shows a list of wireless networks. Shows signal strength on the screen and whether the network is secured or connected to one. Tapping a network name has the keyboard pop up to enter the network password if there is one required. If the user enters a password, underdots the system notifies them that the network is secured. If connect to the network and they are returned to the network screen. Continue tapping on the network the console is currently connected to to disconnect. Different colored WiFi symbol will present a dialog box with the option to forget the settings for that network.
Weather (Weather Underground (Tabulated Regional on Celsius/Metric) are available options in the region. If user authentication using oAS, the Weather Underground API is preferred units as set in the user's profile settings. If oAS is not available, the service mode should be respected.	Enable Alerts	TACEUX	Check	Check/No Check	-	If it has a weather alert from the website, the alert mark will be in red on the weather screen.
	Refresh	TACEUX	-	-	-	Tap to refresh the web connection to Weg. Works even if Weather is not enabled. Button is a web browser.
	Default City	TACEUX	-	Current Location which is determined by either the location stored in the cookies or the IP Address of the console if a location has not been set.	-	Search by touching and dragging on the map. Double tap/click a spot on the map to set as your location.
Applications	Application Setup	TACEUX	Show all available apps	Mkee, Hide/Mkee Inactive, Locked	-	Displays a grid of the app screens. Tapping and holding down on an app will make it cycle between Mkee (other apps will hide) and Locked (all apps will hide). Locked apps will not appear on the run screen. Apps that are Mkee will appear pulled in it locked and cannot be moved.
Calibrate	Calibrate	T (TFE)	Calibrate	Calibrate	Calibration Message: Calibration Successful, Error. All steps to pass the calibration. 2 - Stop Speed. 3 - Ramp Up. Find the maximum Incline. All steps to cancel the calibration. 4 - Ramp Down. 5 - Ramp Up. Calibration complete. Canceled - Calibration Canceled. Error - Calibration failed due to error code 5(	-	Finds the lowest and highest incline positions and records the values in the Calibration Header. During the calibration process the console will ramp up to the maximum incline, the encoder field and a Step Button is not pressed. If the Step button is pressed the encoder will be zero'ed but the adjusted as needed. Calibration will time out at 180 seconds and at this point the Error Calibration Failed Timeout Error Code will be displayed. If Calibration is disabled while Run Machine is active, ramp will stop respond to 5 Step Button presses.
	Max Incline ADC	T (TFE)	5000R	5.0(TE)/4KL - 5999R(10%)	ADC (% Incline)	Set the max incline ADC value. This is usually set to a value that allows the Calibration function and an offset determined by a button press.
	Min Incline ADC	T (TFE)	35328	35328(TE) - 40328(TE)	ADC (% Incline)	Set the min incline ADC value. This is usually set to a value that allows the Calibration function and an offset determined by a button press.
	Disable Control Zone	C	No Check	Check/No Check	-	Enables/Disables the Control Zone Calibration Header in the CD Run Step(Rewing Nature). Reverts to enabled if the Calibration Header is Energy Saver cycle.
	Disable IR Sensor	C	No Check	Check/No Check	-	Enables/Disables the IR Sensor detection feature in the CD Run Step(Rewing Nature). Reverts to enabled if the Calibration Header is Energy Saver cycle.
	Control Zone Threshold	C	0	4-200	-	Sets the threshold for when the Control Zone Auto Step/Rewing activates. Calculated as Baseline Pressure - Baseline Pressure. Baseline Pressure is the pressure when the Control Zone not when no weight is on it.
	Control Zone Pressure	C	0	0-100	-	Displays the current pressure measured by the CD Front the Control Zone not Calibrated. Pressure when the Calibration Cap.
	Frame IR Sensor Frequency	C	20	10-40	Hz	Read Only. Where in the Calibration Header it is regularly update with the current Frame IR Sensor Frequency. Displayed only for the CDR.
Run Machine	Run Machine	TACEUX	Run Machine	Run Machine, Stop Machine, Double Accessory Increment (Up Sec)	0.05, 0.1Hz, RPM, Heart Rate, Watts, Resistance, Incline, Resistance + Incline, RPM, Heart Rate, Watts, Resistance, Incline, Resistance + Incline, Speed, Heart Rate, Incline Sidec, Speed Sidec, Incline Sidec, Speed Sidec, 0 Time, RPM, Heart Rate, Resistance, Resistance Sidec	-	Runs a 'workout' on a machine and at a required Disable Timeout Series. Meant to be used for testing of hardware. What can be adjusted and what goals are dependent on the machine and what is supported. Should allow for the testing of Run Machine functions. Incline, Speed, Heart Rate and Watts have sub-detection modes. Sub-detection modes = Stop, 0 Step, 0 Sensor, Control Zone1, but the Control Zone1 should not be used. Sub-detection modes are only supported for Treadmills. Pause, but not cool Settings.
Hardware	The Status of the BT Sink	TACEUX	-	Okay, Not installed, Communication error	-	Current status of the Bluetooth Sink module. Switches the UI to pull from the BT Sink module. Uses the cmdPlayer for media in Service Level for HDMI and Bluetooth Sink. Console must reboot for this switch to take effect.
	USB Connection Mode	TACEUX	Host	Host, Device	-	Set the USB Connection Mode. Switches the USB port from Host to Device. Uses the cmdPlayer for media in Service Level for HDMI and Bluetooth Sink. Console must reboot for this switch to take effect.
	Accumulated Distance Since Belt Was Last Lubed	T (TFE, TFE, TGE)	0	-	Miles/Km	The accumulated distance since last reset. Displayed in Miles or Kilometers depending on the current Miles/Km. When this value reaches 100Miles it will start a Lube Cycle reminder that appears in the Top Bar every time the Up Button is pressed until the reset is pressed and also perform this operation.
	Reset	T (TFE, TFE, TGE)	0	-	-	Reset only. Displays the accumulated distance since last reset. Sets the value to the nearest 0.01 hours. When this value reaches 100Miles it will start a 'Lube Cycle' reminder that appears in the Top Bar every time the Up Button is pressed until the reset. It also resets the value to 0.
	Hours Since Chain Was Last Lubed	C	0	-	Hours	Button that resets the 'Hours Since Chain Was Last Lubed' option to 0. Holding the Step and Speed Up buttons for 5 seconds will also perform this operation.
	Reset	C	-	-	-	Reset Only. Displays the accumulated hours since last reset. Sets the value to the nearest 0.01 hours. When this value reaches 100Miles it will start a 'Lube Cycle' reminder that appears in the Top Bar every time the Up Button is pressed until the reset. It also resets the value to 0.
	Detect Jiter	C	-	Check	Check/No Check	Hardware Diagnostic. Calculated every 300 ms when enabled. Jiter is the difference between the maximum and minimum steps in less than the target speed and the difference between the target speed and the target speed the CZ4 will ramp to. Jiter is a 16 bit number. This setting always resets to default after a power cycle. Not Supported.
	Energy Saver	TACEUX	Check	Check/No Check	-	Alternates between Energy Saver and Demo Mode. Sends a 1 to power down and launching the Demo Video. When invoked the console goes into Energy Saver. Sends a 0 to wake the console launches the Demo Video. These actions also trigger a power down/up, workout count events, etc. determined by the Energy Saver Timeout setting. Pressing any physical key wakes up the console from Energy Saver. Also ends Video and returns to the Home/Up Screen. The Demo Video can also be ended by touching the screen.
	Energy Saver Timeout	TACEUX	30	1-60	Minutes	Amount of time after which the console will go into Energy Saver mode in the Demo Video.
	Backlight Brightness	TACEUX	100	0-100	-	Set the brightness of the screen.
	Key Test	TACEUX	-	-	-	Button launches the Key Test. Causes the console to display the of subsequent physical key presses. Intended for hardware testing only.
	Display Test	TACEUX	-	-	-	Button launches an app that allows the user to cycle through and test the display. The app cycles through solid colors, text,clear, etc.) and grid lines.
	TouchTester	TACEUX	-	-	-	Button launches an app that allows the user to cycle through and test the touch. The app displays a grid and registers touch.(clear, etc.) and grid lines.
	Play Key Sound	TACEUX	Check	Check/No Check	-	Sound plays when the user presses the Home button. Key Sound Enabled.
	Play Medical Guidelines Sound	TACEUX	Check	Check/No Check	-	Sound plays when the user presses the Home button. Medical Guidelines Enabled.
	Master Volume	TACEUX	5	0-30	-	All apps have their volume maxed, this sets the system volume. Sets the volume machine-like USB standard. Does not affect the system Beep volume.
	Key and Workout Countdown Volume	TACEUX	3	1-5	-	The Key and Workout Countdown Volume is a different audio stream from the main console audio. This allows the system to modify the volume of the sounds independent of the main audio. Sound on.
	Headphone Insertions	TACEUX	0	-	-	Sums the number of times headphones have been inserted and removed from the headphone jack. Can be reset by resetting the factory defaults.
	Headphone Time	TACEUX	-	-	-	Sums the time headphones are inserted. Can be reset by resetting the factory defaults.
Service	Service History	TACEUX	-	-	-	Button launches the Service Dashboard App for Remote logs by Customer Service. Sound plays when the user presses the Home button. Service Dashboard Enabled.
	TeamViewer	TACEUX	-	-	-	All apps have their volume maxed, this sets the system volume. Sets the volume machine-like USB standard. Does not affect the system Beep volume.
	Play Key Sound	TACEUX	Check	Check/No Check	-	The Key and Workout Countdown Volume is a different audio stream from the main console audio. This allows the system to modify the volume of the sounds independent of the main audio. Sound on.
	Play Medical Guidelines Sound	TACEUX	Check	Check/No Check	-	Button launches the Teamviewer app for Remote logs by Customer Service. Sound plays when the user presses the Home button. Medical Guidelines Enabled.
	Master Volume	TACEUX	5	0-30	-	Sums the number of times headphones have been inserted and removed from the headphone jack. Can be reset by resetting the factory defaults.
	Key and Workout Countdown Volume	TACEUX	3	1-5	-	Sums the time headphones are inserted. Can be reset by resetting the factory defaults.
	Headphone Insertions	TACEUX	0	-	-	Sums the number of times headphones have been inserted and removed from the headphone jack. Can be reset by resetting the factory defaults.
	Headphone Time	TACEUX	-	-	-	Sums the time headphones are inserted. Can be reset by resetting the factory defaults.
Errors	Error Log	TACEUX	-	Clear All	Error Code, First Occurrence, Last Occurrence, Count	Gathering, Bell, Drive, Bell+Gathering/Tuneback, Bell+Pairing and Pairing, Bell, Drive, Bell+Gathering, Bell+Drive, Drive, Drive+Sleep, Drive+Sleep+Cadence, Reset, Heartbeat Lost, Pairing, Bell, Accumulated Time, Reset Accumulated Distance, Reset Accumulated Time, Reset Defaults, Speed Service, Reset Accumulated Distance Since Belt Was Last Lubed, Reset Hours Since Chain Was Last Lubed
	Error Log	TACEUX	-	-	-	Generates a service entry from the service history listed in a log that is kept on the Service Dashboard App. Use this log for Asset Management(). Tap Cookie to create the entry for the selected Service Type.
						Error History that can be cleared with the Clear All button. Lists the error codes and the number of occurrences the first and last occurrence of that error code and how many times the error occurred since the first occurrence.

Engineering Mode - Spec

Note: Access by double tapping the bottom left then bottom right corners of the touch screen when in Machine Settings or Service Mode.

Engineering Mode						
Category	Name	Modes	Values	Range	Units	Comments
General	Screen Timeout	TACSLIM	120	15, 30, 60, 90, 120, Never	Seconds	Stopped on: Affiliate Setup, Service Mode, Software Bin Balance Mode, Machine Settings, Summary Screen, etc.) The screen will time out in Machine Settings, Service Mode and Engineering Mode if left idle for this duration
	Accumulated Time	TACSLIM	0.00	0.00 - 9999:59:59	Hours	Can be edited. Accumulated Operation Time* that counts the time the machine is on.
	Accumulated Distance	TACSLIM	0.00	0.00 - 999999.99 Miles / 0.00 - 1610000.00 Km	Miles/Km	Can be edited. Accumulated Distance Traveled* that resets the Room Odo.
	Floors Climbed	C	0	0 - 32.000000	Floors	Read Only. Accumulated Floors climbed in the Home Location to date (Floors Climbed = Floors Up - Floors Down). Allow up to 4 hours. Format = Thousands(,)Hundreds
	Serial Number - Console	TACSLIM	-	ADR, XXX	Complex	Read Only. Serial number assigned to the console module to create a machine identifier that will be used in the Cloud. Format = Alphabetic(3), Alphanumeric(3)
	Serial Number - Frame	TACSLIM	-	A1B, A1D, U1B, U1D, R1B, R1D, T1B, T1D, T1E, T1G, T1H, T1J	Frames	Read Only. Serial number assigned to the complete machine to create a machine identifier that will be used in the Cloud. Format = Alphabetic(1), Alphanumeric(3) Values are available from a Frame Lookup Table.
	Time Zone	TACSLIM	UTC-8 Pacific	UTC-12 to UTC+14	UTC/TZ	Set to Home Location Time Zone (Not Daylight Savings).
	Date Format	TACSLIM	YYYY-MM-DD	Dropdown	-	Date Format for Service Mode.
	Language Setup	TACSLIM	English (U.S.)	Non-Language Table	-	Non-Language Table
Workout	Serial Network Port	TACSLIM	Type1 enabled For Fly Honcho on a Matrix Frame Only	Type1 enabled, Type2 enabled, Disabled	-	Type 1 is Powerlink. Connect Dongle. Expect Training Data. Type 2 is Hybrid Mode. Recumbent Bikes. Type2 Mode, or Disabled.
	Software Versions	TACSLIM	-	Console Version, Software Updater, Native Libraries, Main Apps, Net Apps, Bluetooth Manager, Sports & Keyboard Apps, Bluetooth Stack	Major.Minor.Build.Revision	Read Only. Software versions reported back from the updater and/or manifest.
	Firmware Versions	TACSLIM	-	Console Firmware, Motor Firmware, Sports & Keyboard Firmware, Bluetooth Firmware	-	Read Only. Current software, product firmware versions reported back from the connected devices.
	EMR Environment	TACSLIM	Production	Dev, QA, Staging, Production	-	Sets the environment for communication and updates. Switching requires a reboot.
	Keyboard Disable Threshold	T	2.5MPH/3.2KPH	Machine Minimum - 5.0MPH/8.0KPH	MPH/KPH	Keyboard Disabled at speed at which the keyboard is disabled on a treadmill. Set to Machine Minimum to disable functionality. 0.0MPH/0.0KPH for Ellipticals/Bikes.
	Maximum Workout Time	TACSLIM	120	10-120	Minutes	For gym workouts.
	Maximum Workout Calories	TACSLIM	1000	50-10000	Calories	For gym workouts.
	Maximum Workout Distance	TACSLIM	31.0Mile/50Km	1/4 Mile/0.5Km - 100 Miles / 161 Km	Miles/Km	For gym workouts.
	Maximum Workout Floors	C	150	15-300	Floors	For gym workouts.
	Maximum Level	C	25	10-30	-	For gym workouts. Maximum Level that the operator is allowed to set. Automatically by a User and automatically by a Workout Program. Applies to the Control Zone in Control Zone Mode. Applies to Control Zone as the set point in Manual Mode.
	E Stop Enable	C	Check	Check/No Check	-	Enable/Disable the Emergency Stop function. Applies to the Control Zone in Control Zone Mode.
	E Stop Sensitivity	C	100	4-400	-	Sensitivity of the Emergency Stop. Applies to the Control Zone in Control Zone Mode.
	Pause Time	TACSLIM	5	1-10	Minutes	Time in Pause Mode before the Workout Ends. Start at the machine minimum speed and the incline/level stayed set at the last workout. Applies to the Commercial Machine Workout Mode. Not used for the Retail Machine Mode.
	Maximum Speed	T	22.5MPH/36KPH	7.5 Machine Min MPH/10 Machine Min KPH	MPH/KPH	Maximum Speed that is dependent on Information received from the console. Can be 0.5-22.5MPH/0.7-36KPH. This speed is the speed during workout setup and the speed the treadmill will go to if the Speed Control Pin Fail Safe Mode is enabled.
	Start Speed	T	Machine Minimum	Machine Minimum - 5.0MPH/8.0KPH Maximum	MPH/KPH	Speed at which belt starts during workout setup and the speed the treadmill will go to after a Speed Control Pin Fail Safe Mode.
	Maximum Incline	TM	15.0%	10.0-30.0%	1% Grade	-
	Cool Down Time	TACSLIM	5	1-10	Minutes	Maximum time a user can Enjoy the Cool Down Workout. Applies to Commercial Machine Cool Down Time.
	Maximum Cool Down Adjustment Time	TACSLIM	5	1-20	Minutes	Maximum time a user can adjust the Cool Down Workout. Applies to Commercial Machine Cool Down Adjustment Time.
	Level	TACSLIM	1	1/TM/AFL/0	Programs/Revenue Level	Controls the Workout Level. 1 - Level 1 - Level 1 Workout. AFL - Uses affiliate setup program and received level and duration. TM - Uses Time and Incline to create a workout. 0 - Is a workout the manual may have level and duration but will not have an incline. Applies to Commercial Machine Workout Mode. Not used for the Retail Machine Mode.
Setup Default	Age	TACSLIM	30	10-90	Years	Controls the Workout Level. Applies to Commercial Machine Workout Mode. Not used for the Retail Machine Mode.
	Weight	TACSLIM	150lbs/68kg	150-400lbs/68-181kg (Imp/Met) 50-400lbs/22-181kg (Imp/Met) 50-400lbs/22-181kg (Imp/Met) 50-400lbs/22-181kg (Imp/Met)	lbs/kg	Controls the Workout Level. Applies to Commercial Machine Workout Mode. Not used for the Retail Machine Mode.
	Gender	TACSLIM	Male	Male/Female	-	Controls the Workout Level. Applies to Commercial Machine Workout Mode. Not used for the Retail Machine Mode.
	Default Workout Time	TACSLIM	30	5-Max	Minutes	For Max Size Workout Category.
	Default Workout Calories	TACSLIM	300	50-Max	Calories	For Max Size Workout Category.
	Default Workout Distance	TACSLIM	3.0Mile/5.0Km	0.0Mile/0.0Km - Max	Miles/Km	For gym workouts. For Max Size Workout Category.
	Default Workout Floors	C	25	15-Max	Floors	For gym workouts. For Max Size Workout Category.
	Default Web page	TACSLIM	http://www.netflix.com	-	-	Home page the console opens to on startup.
Update	Automatic Update	TACSLIM	Check	Check/No Check	-	A function to allow the machine to check for updates or if allow it or if it should just do it automatically once the next check. If an update is available the machine will download all update files and download the console update. If the console update is available the console will download the update. When the console is done with the update it will enter Service Mode or Machine Settings (depending on where mode(s) if the console was in when the console then loaded the update when it passes back to the home screen.
	Update From USB	TACSLIM	Update From USB	Update From USB/Install	-	Allow or prevent the machine to check for updates. If updates are found the machine will load the update. Updates and the button will display when found.
	Check For Updates	TACSLIM	Check For Updates	Check For Updates/Install	-	Allow or prevent the machine to check for updates. If updates are found the machine will load the update. Updates and the button will display when found.
	Available Updates	TACSLIM	-	Software Updates, Native Libraries, Main Apps, Net Apps, Bluetooth Manager, Sports & Keyboard Apps, Bluetooth Firmware	Major.Minor.Build.Revision	List packages that have updates available from the updater.
Restore Factory Defaults (Always available, not in a User tab)	Restore Factory Defaults	TACSLIM	-	-	-	Resets various options, counters, and configurations back to defaults prior to shipping. Preserves factory Key Factory Defaults, Serial Number, Model and values. It also resets the Key Factory Defaults back to factory defaults.
Network Setup	Wifi Mac Address	TACSLIM	Hardware Specified	0:0:0:0:0:0 - FF:FF:FF:FF:FF:FF	Byte Byte Byte Byte Byte Byte in Hex	Mac address is pulled from the installed hardware. Read Only, should not show up if not installed on hardware.
	Wifi Setup	TACSLIM	-	-	-	Goes to the WiFi setup page. Requires Hardware Function or Free Time Setup for WiFi setup. Only shows if hardware is installed. Not used for Retail Machines.
Network Setup (WiFi Setup)	Available Wireless Networks	TACSLIM	-	-	-	If the user selects Other Network the machine is prompted to enter the network name and password. We assume protocol from WEP, WPA, WPA2, WPA2-Enterprise. Not used for Retail Machines.
				Wireless networks in range with Other Network* (Always Shown) Max 10 networks. Max 32 characters. Use the list to specify their own network.	-	If the user selects a Wireless network in range the machine is prompted to enter the password. Assume protocol from WEP, WPA, WPA2, WPA2-Enterprise. Not used for Retail Machines.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
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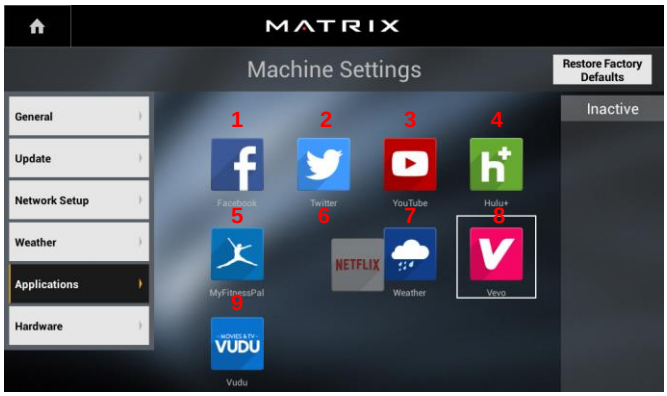
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
					-	Allows the user to set the network to a network not in range. Requires the user to specify their own network.
Weather (Note: Uses Fahrenheit or Celsius based on Machine Setting, Uses Imperial or Metric based on Machine Setting, Uses Time based on Machine Setting)	Enable Alerts	TACSLIM	-	Check/No Check	-	Turn on/off the Weather Alerts. Alerts will display if the weather is at or over the preferred units as set in the Weather Setup. If set to guest user, the setting in service mode should be respected.
	Refresh	TACSLIM	-	-	-	Force a refresh of the weather data. Refresh will ignore the preferred units as set in the Weather Setup. If set to guest user, the setting in service mode should be respected.
	Default City	TACSLIM	Current Location which is the Home Location if the Home Location is not set. Set to the Home Location if the Home Location is set. Set to the last used if a location has not been set.	-	-	Set the default location used for the weather. Set to the Home Location if the Home Location is set. This is an issue with Bing as opposed to the web app.
Applications	Application Setup	TACSLIM	Show all available apps	Meet, Hola Media Inactive, Locked	-	Display a grid of the app buttons. Tapping an app will toggle the app between locked and unlocked. Locked apps cannot open and will automatically. The app can be set to locked if the app is active and it will close and lock the app if it is open. If an app button is pressed it will toggle between locked and unlocked to unlock.
Calibration	Calibration	1 (FTB)	Calibrate	Calibrate	Calibration Messages: 1. Finding the minimum voltage. 2. Finding the maximum voltage. 3. Found low ADC %1. Calibration failed. Check the wiring or contact the technician. 4. ADC value found = %1 %2. Calibration complete. Cancelled. Calibration Failed. Error. Calibration Failed due to error code %1	Finds the lowest and highest incline positions of the motor. Finding the minimum voltage. Finding the maximum voltage. Calibration complete with some of the messages. Calibration failed with some of the messages and calibration error. The Calibration Messages are displayed as needed to have the incline read out on the screen.
		2 (FTB)				Note that Reduce to Factory Defaults will reset calibration and Calibrate is disabled when the Factory Defaults are set (unprotected) Step, but not not settings.
	Max Incline ADC	1 (FTB)	34808	32767(1%) - 38808(5%)	ADC (% incline)	Sets the max incline ADC value. This is used to offset calibration by a system alignment.
	Min Incline ADC	1 (FTB)	31028	30208(1%) - 40208(5%)	ADC (% incline)	Sets the min incline ADC value. This is used to offset calibration by a system alignment.
	Disable Control Zone	C	No Check	Check/No Check	-	Disable the Control Zone (Boolean). Applies to Control Zone (Keep Walking Running). Disable Control Zone if sensor curve, relayed or Energy Saver using.
	Disable VFD Error	C	No Check	Check/No Check	-	Disable/Enable the VFD Error detection function on a Control Zone machine. Applies to Control Zone (Keep Walking Running). Disable if sensor curve, relayed or Energy Saver using.
	Control Zone Threshold	C	0	0-200	-	Read Only. Value at which the Control Zone Assumes the Belt is Moving. Applies to Control Zone (Keep Walking Running). Overload against the Current Pressure. Based on Current Pressure. Value is the pressure measured from the Control Zone and the Current Pressure.
	Control Zone Pressure	C	0	0-100	-	Read Only. Value of the pressure measured by the CZR from the Control Zone. Applies to Control Zone (Keep Walking Running). Pressure value in the Calibration Tab.
	Frame ID Person Frequency	C	20	10-40	Hz	Read Only. When in Use Mode the Frame ID Person will regularly update with the current Person Frequency. Person Frequency calculated by the CZR.
	Run Machine	TACSLIM	Run Machine	Run Machine, Stop Machine, Disable Control Zone, Reset Sensors	Edit Time, RPM, Reset Hours, Reset Distance, Reset Calibration, Reset Sensors, Reset Hours Since Last Service, Reset Hours Since Last Error, Reset Hours Since Last Power Up, Reset Hours Since Last Service, Reset Hours Since Last Error, Reset Hours Since Last Power Up, Reset Hours Since Last Service, Reset Hours Since Last Error, Reset Hours Since Last Power Up	Run a manual or a machine and or a treadmill. Run Machine, Stop Machine, Reset for testing and calibrating the hardware. Disable Control Zone for Reset Calibration, Reset Sensors, and Reset Hours Since Last Service. Reset Hours Since Last Error and Reset Hours Since Last Power Up. Reset Calibration and Reset Sensors are used to reset the factory or Run Machine Calibration. Reset Hours Since Last Service, Reset Hours Since Last Error and Reset Hours Since Last Power Up are used to reset the hours. Run and Stop are used to start and stop the machine. Run Machine and Stop Machine. Edit Time, RPM, Reset Hours, Reset Distance, Reset Calibration, Reset Sensors, Reset Hours Since Last Service, Reset Hours Since Last Error, Reset Hours Since Last Power Up.
Hardware	The Status of the VP Code	TACSLIM	-	Okay, Not installed, Communication error	-	Current of status of the Bluetooth Dongle.
	USB Connection Mode	TACSLIM	Host	Host, Device	-	Sets the USB port to Host or Device. Host is used for dongle. Device is used for Bluetooth Development. Note that the console must be rebooted for the change to take effect.
	Accumulated Distance Since Belt Was Last Lubed	1 (FTB) (FTB), (FTB), (FTB)	0	-	Miles/Km	Read Only. Displays the accumulated distance since the belt was last lubed. Resets the value to the stored Miles/Km. When this value reaches 1,000 Miles/Km it triggers a Lube Belt reminder that appears in the Lube Belt Setup. Reset by hours is launched under this value is reset to 0.
	Reset	1 (FTB) (FTB), (FTB)	-	-	-	Reset the Accumulated Distance Since Belt Was Last Lubed. Reset Hours Since Last Lubed. Stop and Spend buttons for Customers will stop the belt and reset the hours.
	Hours Since Clear Wax Last Lubed	C	0	-	Hours	Read Only. Accumulated hours since last wax/lubed. Resets the value to the stored 0.0 hours. When this value reaches 1,000 hours it triggers a Wax/Lube Chain reminder that appears in the Tap the Lube Chain Setup. Reset by hours launched under this value is reset to 0.
	Reset	C	-	-	-	Reset the Accumulated Hours Since Clear Wax Last Lubed* (gym is C). Holding down the Reset button for 5 seconds will also perform this operation.
	Detect Jam	C	Check	Check/No Check	-	Enable/Disable the Jam Detection function. Jam Detection is enabled. When the actual speed is less than the set point and the difference between the actual speed and the set point is more than 10 MPH/16KPH* the target speed the VFD will stop the motor and the motor. The setting is ignored if the belt is moving after a power cycle or Energy Saver cycle.
	Energy Saver	TACSLIM	Check	Check/No Check	-	Alternates between Energy Saver and Normal Mode. Energy Saver mode is a low power mode that turns off most items when in Energy Saver. When checked the Energy Saver mode is enabled. When unchecked the Energy Saver Timeout setting. Turning off Energy Saver wakes up the console from Energy Saver or the Sensor Wake Up Function. Sensor Wake Up Function. The Sensor Wake Up Function is only touching the screen.
	Energy Saver Timeout	TACSLIM	30	1-60	Minutes	Amount of time after which the console enters a low power mode. Applies to Energy Saver.
	Backlight Brightness	TACSLIM	100	0-100	-	Sets the brightness of the screen.
	Key Test	TACSLIM	-	-	-	Same demo as Key Test but. Causes the console to show the key presses on the physical key pad as the key presses. Exit by selecting a key.
	Display Test	TACSLIM	-	-	-	Button function test. Allows the user to activate the buttons on the screen. Tap each button to continue tests (skip, etc). Exit by selecting a button.
	Transmission	TACSLIM	-	-	-	Button Function Test. Transmission Test for Remote Diagnostic Service. Restarts the console in Test Mode. Exit by rebooting.
	Machine Setup	TACSLIM	-	-	-	Button Function Test. Allows the user to access the Frame Numbers and Frame Lookup Table. Accessible via Menu.
	Play Key Sound	TACSLIM	Check	Check/No Check	-	Turn on/off the key sound.
	Play Workout Countdown Sound	TACSLIM	Check	Check/No Check	-	Turn on/off the workout countdown sound.
	Master Volume	TACSLIM	5	0-30	-	Set the volume for the entire system. Set to 0 if the speaker is broken. Does not affect the system beep.
	Acts and Workout Countdown Volume	TACSLIM	3	1-5	-	Sets the volume for the Acts and Workout Countdown sounds are on a scale of the master volume. The setting allows the user to make the sounds louder than adjustment of the main system volume.
	Headphone Inactivity	TACSLIM	0	-	-	Headphone Inactivity. Resets Volume to Max if headphones are unplugged. Headphones are inserted and removed from the headphone jack. Headphone Inactivity Setting. Factory defaults. Better than resets the headphone volume to Max. Removed course for 2.
Service	Service History	TACSLIM	-	Belt, Belt Wax, Belt Lube, Belt Inspection, Belt Tension, Belt Alignment, Running and Flat Belt, Belt Replacement, Belt Wear Strips, Chain, Rear Cushion Block, Rear Cushion Block Adjustment, Rear Cushion Assembled Time, Reset Hours Since Last Service, Total Hours, Reset Distance Setting, Speed Sensor, Reset Hours Since Last Error, Reset Hours Since Last Power Up, Reset Hours Since Last Service	-	Generates a service entry. Belt, Belt Wax, Belt Lube, Belt Inspection, Belt Tension, Belt Alignment, Running and Flat Belt, Belt Replacement, Belt Wear Strips, Chain, Rear Cushion Block, Rear Cushion Block Adjustment, Rear Cushion Assembled Time, Reset Hours Since Last Service, Total Hours, Reset Distance Setting, Speed Sensor, Reset Hours Since Last Error, Reset Hours Since Last Power Up, Reset Hours Since Last Service
Errors	Error Log	TACSLIM	-	Clear All	Error Code, First Occurrence, Last Occurrence, Count	Error history that can be cleared with the Clear All button. Error Code, First Occurrence, Last Occurrence, Count. The first and last occurrence are in Machine Hours. Error History Header. Error Header.
	Demo Mode	TACSLIM	No Check	Check/No Check	-	Sets the console into a demo mode. Allows the user to simulate the workout experience without the console software. Sets RPM, IR, TM, Incline, Speed, Distance, Calories, Floors, Heart Rate. Ignores Energy Saver setting.
Advanter Settings	Display Grid Codes	TACSLIM	No Check	Check/No Check	-	-
	Debt Cover Reset	TACSLIM	No Check	Check/No Check	-	-
	Enable Crickets*	TACSLIM	No Check	Check/No Check	-	The Crickets* is not yet implemented. Crickets are a feature that will be implemented before this mode is ready for Advanter. Crickets are a debugging code for Advanter. Not this model are kept in the code for future use/testing/ trying to find a bug.
	Model	TACSLIM	-	A1B, A1D, U1B, U1D, R1B, R1D, T1B, T1D, T1E, T1G	-	Allows the user to set the model. Allows the user to set the complete list of models to be used. Allows the user to write to Demo Mode.

App Setup Home Screen

Certain apps are 'locked' and cannot be moved or made inactive.

If all apps cannot fit onscreen swipe up to find more.

Tap and hold on an app to make it movable.

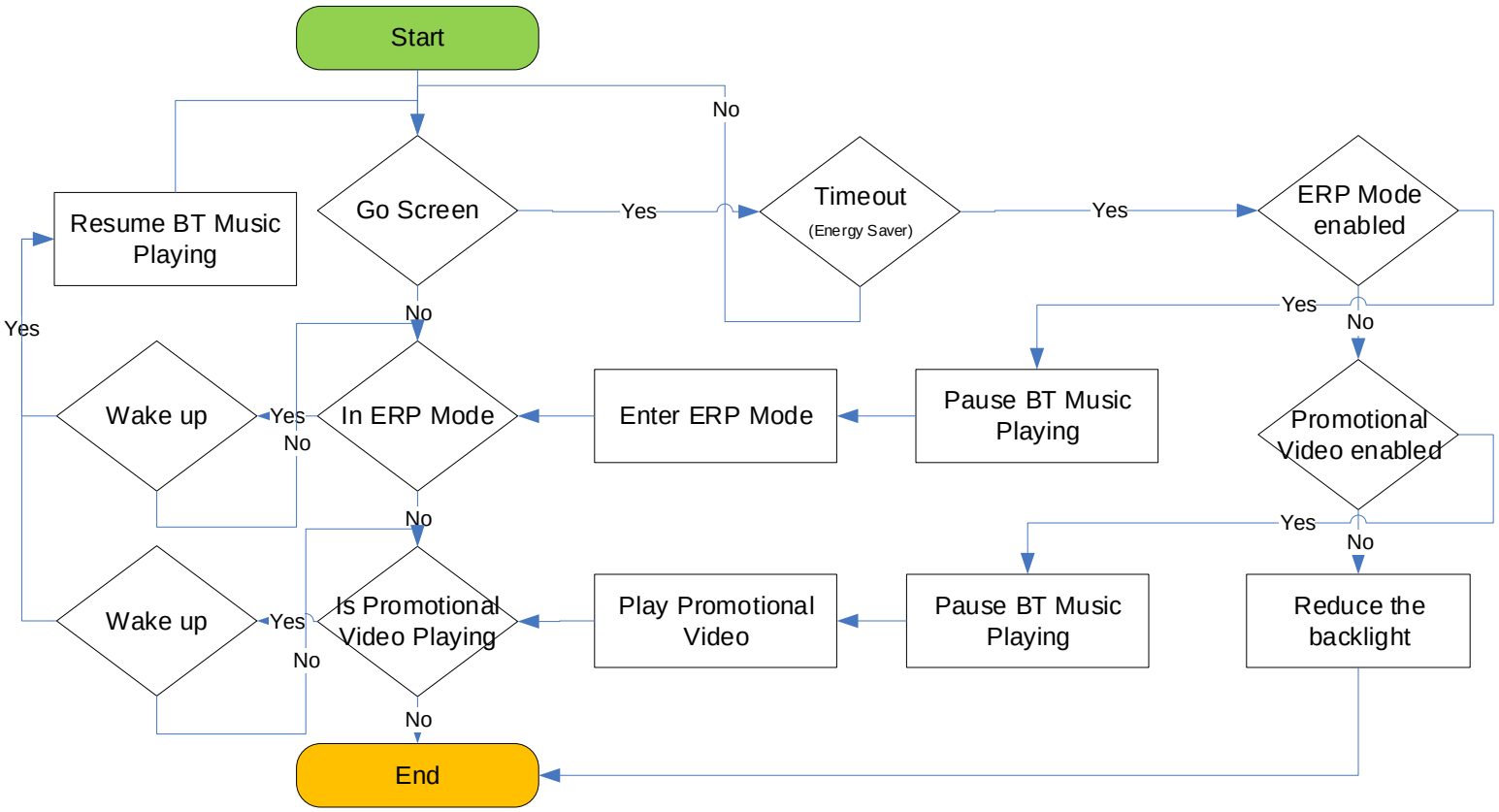


When moving an app other apps will shift out of the way. Movement is forward/backward in the apps grid like it is a list. See above for the ordering used for the apps.

Apps can be removed from the Run Screen by moving them to the 'Inactive' column.

Youtube App should now not show up on the Run Screen during a workout.

ERP vs Promotional Video



ERP vs Promotional Video	Treadmill		Bike		Elliptical		Ascent		Climbmill	
Wake up conditions	ERP Mode	Promotional Video	ERP Mode	Promotional Video	ERP Mode	Promotional Video	ERP Mode	Promotional Video	ERP Mode	Promotional Video
Physical Key pressed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Touch Panel touched	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Plugg in/out Safety-Key	No	Yes	-	-	-	-	-	-	-	-
Watts generate	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-
Lock/unlock E-Stop	-	-	-	-	-	-	-	-	No	Yes

Message Center

- Messages are displayed once per workout and all will have a delete button to remove the message. (Note, if the same message re-enters the queue it would get displayed again.).
- Messages that are too long to display (such as weather alerts) in the top bar will have an ellipses indicating more information can be displayed if the message area is tapped. These messages do not delete until the modal message is viewed.
- Messages will come with a title for display in the modal message (weather alerts will have titles). This title can be blank (as it currently is for console messages).
- Messages stack/display in the following ways:
  - Higher priority messages cover lower priority messages and earlier messages cover more recent messages.
  - Messages are prioritized by value with lower values equating to higher priority. The value is a floating point and values for current messages will be marked out in units of 10. Current message categories are as follows:

Message Category	Priority Value	Display Duration (TTL) : Default = 30 Seconds
Heart rate Warning	10	Must be dismissed by tapping the delete button or opening a modal if one is required.
Keyboard Disabled Warning (for Treadmill and Climbmill)	10	10 Seconds.
Alerts (E.g., Weather Alerts)	30	Must be dismissed by tapping the delete button or opening a modal if one is required.
Heart rate Measurement Warning	50	Must be dismissed by tapping the delete button or opening a modal if one is required.
Treadsense Messages	60	10 Seconds

launch the keyboard and when the keyboard is automatically disabled due to reaching the speed threshold.

To test the keyboard warning:

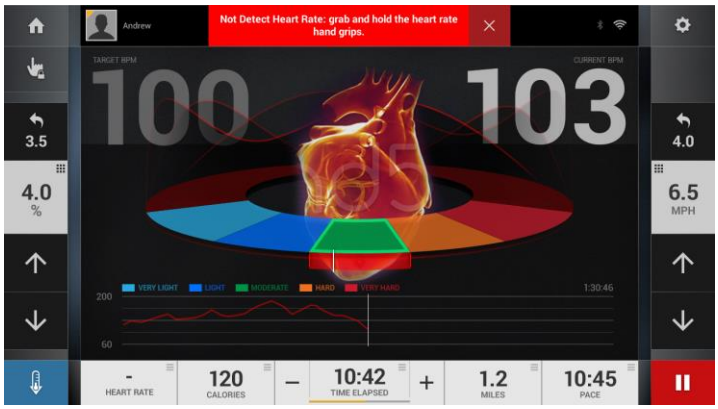
1) Set the TM speed higher than 2.0 mph or the CM greater than level 1.
2) Open an app that uses the keyboard (examples: YouTube, Web Browser, Netflix)
3) The keyboard will not appear on the screen if the speed is too fast. Instead, the warning will appear in the message center.

Warning Messages:
For CM:
"Keyboard disabled when Climbmill is above level 1."
For TM:
"Keyboard is disabled when treadmill is above 2.0 mph."

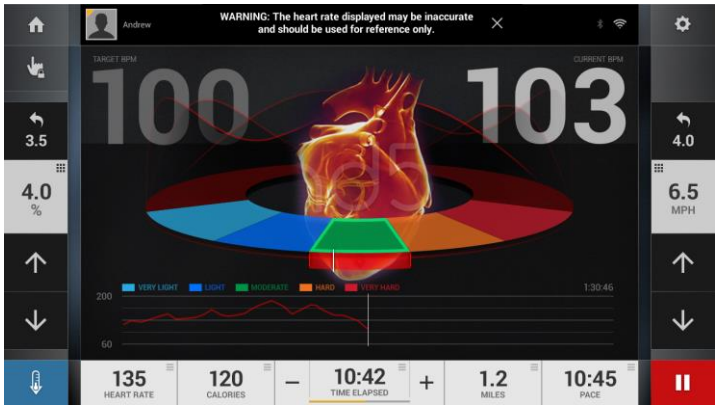
- Messages from the web can have their colors transmitted with the message.

- Additional Info:
  - Welcome Screen does not show message center messages.
  - Languages are accounted for by the console query including locale.
  - Messages are deleted at the Workout Summary Screen (MG-40)
  - Weather alerts are checked every minute during a workout.

No Heart Rate Warning

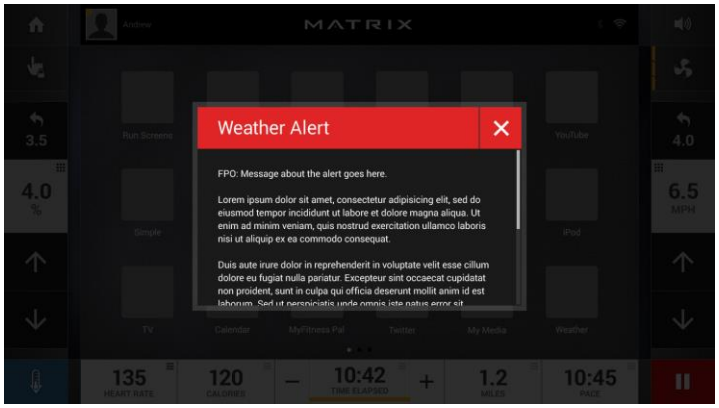


Heart Rate Not Accurate Warning



Weather Warning

More Info Popup



Languages

Languages		*languages*	**xer**	**xir**
ENGLISH	→	*English*	✓	✓
GERMAN	→	*Deutsch*	✓	✓
FRENCH	→	*Français*	✓	✓
ITALIAN	→	*Italiano*	✓	✓
SPANISH	→	*Español*	✓	✓
DUTCH	→	*Netherlands*	✓	✓
PORTUGUESE	→	*Português*	✓	✓
CHINESE (S)	→	*中文简体*	✓	✓
CHINESE (T)	→	*中文繁體*	✓	✓
JAPANESE	→	*日本語*	✓	✓
THAI	→	*ภาษาไทย*	✓	✓
MALAYSIAN	→	*Melayu*	✓	✓
KOREAN	→	*한국어*	✓	✓
SWEDISH	→	*Svenska*	✓	✓
FINNISH	→	*Suomi*	✓	✓
RUSSIAN	→	*рýсскиў*	✓	✓
ARABIC	→	*العربية*	✓	✓
POLISH	→	*Polski*	✓	✓
VIETNAMESE	→	*Tiếng Việt*	✓	✓
TURKISH	→	*Türkçe*	✓	✓
20 TOTAL			**20 TOTAL**	**20 TOTAL**

Languages - Locale

Language	Country / Region	Locale String
Arabic		ar_
Arabic	United Arab Emirates	ar_AE
Arabic	Bahrain	ar_BH
Arabic	Algeria	ar_DZ
Arabic	Egypt	ar_EG
Arabic	Iraq	ar_IQ
Arabic	Jordan	ar_JO
Arabic	Kuwait	ar_KW
Arabic	Lebanon	ar_LB
Arabic	Libya	ar_LY
Arabic	Morocco	ar_MA
Arabic	Oman	ar_OM
Arabic	Qatar	ar_QA
Arabic	Saudi Arabia	ar_SA
Arabic	Sudan	ar_SD
Arabic	Syria	ar_SY
Arabic	Tunisia	ar_TN
Arabic	Yemen	ar_YE
German		de_
German	Austria	de_AT
German	Belgium	de_BE
German	Switzerland	de_CH
German	Germany	de_DE
German	Liechtenstein	de_LI
German	Luxembourg	de_LU
English		en_
English	Australia	en_AU
English	Belgium	en_BE
English	Botswana	en_BW
English	Belize	en_BZ
English	Canada	en_CA
English	United Kingdom	en_GB
English	Hong Kong SAR China	en_HK
English	Ireland	en_IE
English	India	en_IN
English	Jamaica	en_JM
English	Marshall Islands	en_MH
English	Malta	en_MT
English	Namibia	en_NA
English	New Zealand	en_NZ
English	Philippines	en_PH
English	Pakistan	en_PK
English	Zimbabwe	en_RH
English	Singapore	en_SG
English	Trinidad and Tobago	en_TT
English	United States	en_US
English	United States	en_US
English	U.S. Virgin Islands	en_VI
English	South Africa	en_ZA
English	Zimbabwe	en_ZW
Spanish		es_
Spanish	Argentina	es_AR
Spanish	Bolivia	es_BO
Spanish	Chile	es_CL
Spanish	Colombia	es_CO
Spanish	Costa Rica	es_CR
Spanish	Dominican Republic	es_DO
Spanish	Ecuador	es_EC
Spanish	Spain	es_ES
Spanish	Guatemala	es_GT
Spanish	Honduras	es_HN
Spanish	Mexico	es_MX
Spanish	Nicaragua	es_NI
Spanish	Panama	es_PA
Spanish	Peru	es_PE
Spanish	Puerto Rico	es_PR
Spanish	Paraguay	es_PY
Spanish	El Salvador	es_SV
Spanish	United States	es_US
Spanish	Uruguay	es_UY
Spanish	Venezuela	es_VE
Finnish		fi_
Finnish	Finland	fi_FI
French		fr_
French	Belgium	fr_BE
French	Canada	fr_CA
French	Switzerland	fr_CH
French	France	fr_FR
French	Luxembourg	fr_LU
French	Monaco	fr_MC
Italian		it_
Italian	Switzerland	it_CH
Italian	Italy	it_IT
Japanese		ja_
Japanese	Japan	ja_JP
Korean		ko_
Korean	South Korea	ko_KR
Dutch		nl_
Dutch	Belgium	nl_BE
Dutch	Netherlands	nl_NL
Polish		pl_
Polish	Poland	pl_PL
Portuguese		pt_
Portuguese	Brazil	pt_BR
Portuguese	Portugal	pt_PT
Russian		ru_
Russian	Russia	ru_RU
Russian	Ukraine	ru_UA
Swedish		sv_
Swedish	Finland	sv_FI
Swedish	Sweden	sv_SE
Turkish		tr_
Turkish	Turkey	tr_TR
Chinese		zh_
Chinese	China	zh_CN
Chinese	Taiwan	zh_TW

Overlay – xir, xer

xer

xir and xer

Definitions I

Touch Button:
A logical button on the touch screen which interacts with the user. Normally it will respond to a tap event and to certain things.

Toggle Button:
Button is normally used for a selection between a certain number of options , the selected option with its button highlighted while others is grayed.

Button pressed:
A button is tapped and released by user quickly.

Button Activated:
A toggle button is selected.

Enabled:
A toggle or touch button is ready to receive a user's touch event.

Disabled:
A toggle or touch button does not receive any user's touch event.

Dial:
A slider usually works for adjusting parameters, it always has a maximum and minimum value which is called range, and a default value.

Flick:
Function describing the animation

Move:
Hold finger and scroll over webpage to scroll and view additional content

Multiple touch:
ability to recognize the presence of two or more points of contact with the surface.

Dialog:
A dialog usually shows up when user needs some help and some system information needs to notify the user. For example, when the safety key is removed, a dialog will show up to notify the user safety key is removed.

Keyboard:
There are two types of keyboards in our console system, one is a physical keypad. The other is the virtual keyboard which is simulated by software to simplify user's input. Only the physical keypad can be tested in the hardware test.

Font:
A special term to describe the size and format of the characters shown on screen.

OSD:
On screen display.

Virtual Active Integrated:
Virtual Active integrated means system can play local virtual active videos

USB Device Media Player
The console can detect USB device and search the Media files what the device's file can be read out by console.

Definitions II

Simple Console Apps - Press to open the Simple console Screen

Virtual Active Apps - Press to open the Virtual Active Screen in Run Screen

Twitter Apps - Press to open the Twitter Screen in Run Screen

Facebook Apps - Press to open the Facebook Screen in Run Screen

Weather Apps - Press to open the Weather Screen in Run Screen

YouTube Apps - Press to open the YouTube Screen in Run Screen

Change workout Apps - Press to open the Change workout Screen in Run Screen

Web Browser Apps - Press to open the Web Browser Screen in Run Screen

Media Apps - Press to open the Media Screen in Run Screen

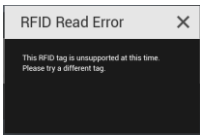
Social Media Button, Transparent for not connected

Go Button

Info Button

Arrow Button

Info Box



Check Button, highlight for current setting.

Left Arrow – Press to switch into previously screen

Right Arrow – Press to switch into next screen

- – Press to reduce workout time, decrease by 1 minute at a time.

+ – Press to Add workout time, increase by 1 minute at a time.

Note: If the workout is programmed with intervals/stages then adding/removing time will only affect those intervals/stages that are occurring and have not yet occurred. E.g., if you are in interval 5 of a 10 interval workout then adding/ removing time will only increase/decrease the time in intervals 5 to 10 of the workout.

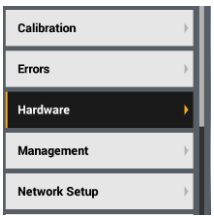
Default User or Guest

Edit box, tap to edit.

Checked Item

Unchecked Item

Scroll list, dark button is selected.



Fan – Press to control fan, OFF->Level 1 -> Level 2 -> Level 3 ->OFF

Screen Lock – Press to Lock/Unlock the workout Screen

Previous playlist – Press to play the previous playlist, Hold to begin fast rewind, release to end the rewind.

Next playlist – touch to play the next playlist, Hold to begin fast forward, release to end the fast forward.

Pause/Play – Press to start or resume playing from pause; or pause from playing

Menu – Press to pop up the Menu

Parameter Button – Toggle to switch display

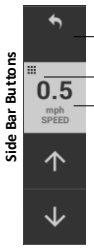
Home – Press to go workout Apps home screen

Cool Down Button – Press the button to enter Cool down phase.

Virtual Keyboard

Stop – Press to stop the workout.

Pause – Press to pause workout

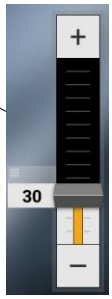


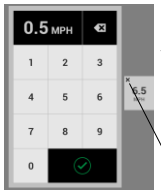
Last Value

- Calculator Button, touch to open calculator window

Current Value

Slider





Virtual Keypad

Close Keypad

Note: The keypad fills in right-to-left. Ex.: Entering 5 for the incline will set it to 0.5% while entering 5 then 0 will set it to 5.0%.

Last Value Behavior

The last value shows the value of a parameter (Resistance/Incline/Speed) before the user changed it to a new one. This gets updated with the Current Value whenever the user changes the parameter, not when a workout program does though.
Users can tap on this Last Value at any time to set the parameter to it. The Last Value is then set to what was the Current Value (so you can alternate back-and-forth).

Additionally, if the parameter is speed and the last value is 1.1 MPH/1.7 KPH or higher than the current speed, the user is prompted with an "OK" button to confirm the speed change. The above also applies on the Climbmill for resistance and the last value 4 or higher than the current resistance.

Heart Rate Source Precedence

BLE Heart Rate > 5kHz Heart Rate > Heart Rate Hand Grips

No Router/DAPI connection

No Internet

Connected to Internet

Formulas

Note: The below calculations can have an error tolerance of ±5%. For instance, in Sprint 8 with a weight of 150lbs, sprint speed of 4.9mph and sprint incline of 3.0% the calculated Sweat Score (for 30 seconds) is 48, but the displayed score is 46. This OK as 46 is within 5% of 48.

Calories

Treadmill - For Running(4.1 MPH or more):

((Target_MPH * 26.8 * 0.2) + (%_Target_Incline * Target_MPH * 26.8 * .9) + 3.5) * (lbs./2.2) * .005 (kcal/min)

Treadmill - For Walking(4 MPH or less):

((Target_MPH * 26.8 * 0.1) + (%_Target_Incline * Target_MPH * 26.8 * 1.8) + 3.5) * (lbs./2.2) * .005 (kcal/min)

Bike:

(Watts * .000238846) * 4.54 (kcal/second)

((Watts * 12.0) + (3.5 * Weight(kg))) * 0.005 (kcal/min) – Currently used in the software

EP:

((Watts * 12.0) + (3.5 * Weight(kg))) * 0.005 * Time(minutes) * 1.25 (kcal)

((Watts * 12.0) + (3.5 * Weight(kg))) * 0.005 (kcal/min)

((MPH * 26.8 * 0.2) + 3.5) * Weight(kg) * 0.005 (kcal/min) – Currently used in the software

Stepper:

(SPM * 17 – 11) * Weight(kg) / 42 / 10000 * Time(seconds) (kcal)

((Watts * 12) + (3.5 * Weight(kg))) * 50 / 10000 (kcal/min) – Currently used in the software

Climbmill:

(METS * 3.5 * Weight(kg)) / 200 (kcal/min)

(VO2 * Weight(kg)) / 200 (kcal/min) – Currently used in the software

****

Speed

Ascent & EP:

RPM / 16 (MPH)

RPM * 66 * 0.00947 ? 0.1 (MPH)

RPM * 0.07 + Watts * 0.015 (MPH) – Currently used in the software

Bike:

Watts > 13:

Cube Root (52.63 * (Watts-13)) (MPH)

Watts <= 13:

Cube Root (52.63 * 0.1) (MPH)

****

METS

Treadmill - For Running(4.1 MPH or more):

METS = (3.5 + (5.36 * Target_MPH) + (24.14 * Target_MPH * %_Target_Incline)) / 3.5

Treadmill - For Walking(4 MPH or less):

METS = (3.5 + (2.68 * Target_MPH) + (48.28 * Target_MPH * %_Target_Incline)) / 3.5

EP/Bike/Ascent:

METS = (Watts * 12) + (Weight(kg) * 3.5) / (Weight(kg) / 3.5)

METS = (Watts * 12 + 3.5 * Weight(kg)) / Weight(kg) / 3.5 – Currently used in the software

Climbmill:

METS = VO2max / 3.5

Stepper:

METS = ((Watts + (35 * Weight(kg))) / Weight(kg) / 3.5) * 0.1

****

Watts

Treadmill:

Watts = Calories/Hour / 4.2

Climbmill:

Watts = Weight(kg) * 9.8 (m/s^2) * sec(26.66°) * SPM * 0.0033867

Watts will be determined by a Watts Table, but a backup is the above formula.

Stepper:

RPM < 25

Watts = ((SPM * SPM / 100 * 2.16) * ((768 - (12 * SPM)) / 6)) / 64 + (RPM=20:1, RPM=21:3, RPM=22:2, RPM=23:4, RPM=24:1)

RPM >= 25

Watts = ((SPM * SPM / 100 * 2.16) * ((8020 - (29 * SPM)) / 140)) / 64 + (22 + (.72 * (RPM - 25)))

Others:

Follow the Watts Table and

1 - Use interpolation of the resistance and RPM levels to measure Watts.

Ex: Watts A30 at 33 RPM and Level 2 = ((33 - 30) / (35-30)) * (26 - 19) + 19 = 23.2 = 23.

2 – Perform a simple lookup (currently used in the software):

RPM = 0 if RPM ≤ 15 (minimum for most tables)

RPM = (RPM – 15) / 5 + 1 which translates to RPM rounded down to the nearest multiple of 5 + 10.

Ex: RPM = 43 -> (43 – 15) / 5 + 1 -> 28 / 5 + 10 -> 25 + 10 -> 45 RPM

Watts = Translated RPM + Level lookup, so from the example above we would report the Watts in the 45 RPM column at the current resistance Level.

****

VO2

VO2max = ((Watts * 12) + (Weight(kg) * 3.5)) / Weight(kg)

Climbmill:

VO2max (ml/kg/min) = (0.2 * SPM) / 4 + (1.33 * 1.8 * Step_Height(meter) * SPM) * 0.650 + 3.5

****

※ 1 MPH = 1.6 km/h

※ 1 kg = 2.2 lbs.

※ Pace = 60 / Speed (in MPH or km/h).

Note: % grade should be stated in decimal mode. For example, 5% grade would be .05.

Sprint Sweat Score:

Sweat Score += Current_Watts / 100.0; Accumulated every second.

****

Elevation

Treadmill:

Following the description found here: https://en.wikipedia.org/wiki/Grade_(slope). The % incline displayed on a treadmill is % grade where the % incline is out of 100%.

Elevation (m/s) = (km/h / 3600.0 * 1000.0) * sin(arctan(%_Target_Incline) (radians))

Note: Total elevation is the above equation calculated every second and added to a running total.

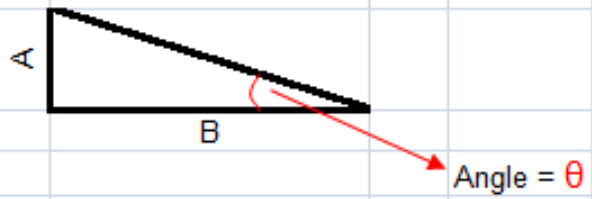
~~Elevation (m/s) = (km/h / 3600.0 * 1000.0) * sin(%_Target_Incline * 45.0 * 3.14159 / 180.0)~~

Climbmill & Stepper:

Elevation = SPM / 60 / Step_Height(meter)

Incline

Worksheet to convert "% of Incline" and "Angle of Incline"



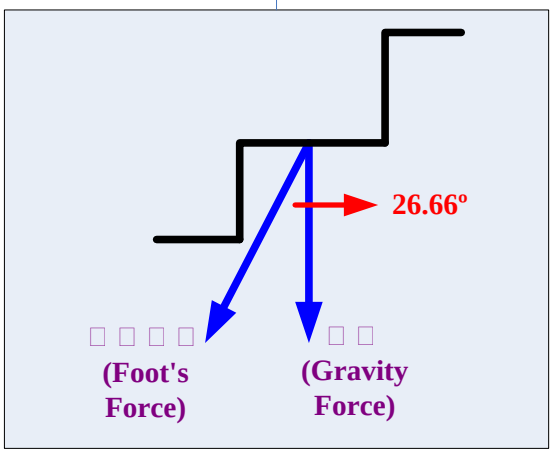
Useful Formulas:

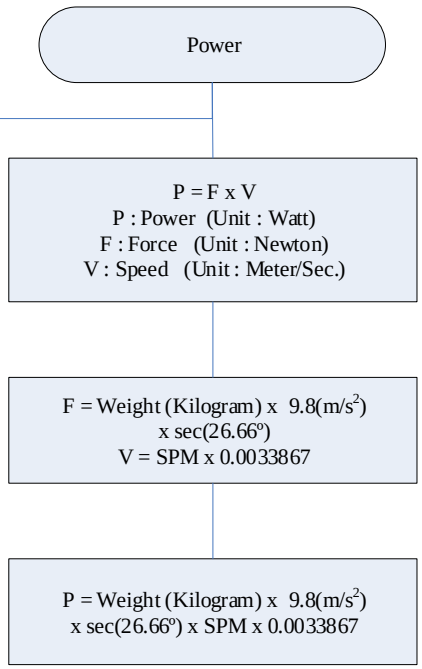
1.	% of Incline = (A / B) * 100
2.	Angle of Incline (θ)= Tan^{-1}(A / B)

Climbmill SPM table

Levels	**30**	
Level 1	**24**	
Level 2	29	
Level 3	33	
Level 4	38	
Level 5	43	
Level 6	48	
Level 7	52	
Level 8	57	
Level 9	62	
Level 10	66	
Level 11	71	
Level 12	76	
Level 13	80	
Level 14	85	
Level 15	90	
Level 16	95	
Level 17	99	
Level 18	104	
Level 19	109	
Level 20	113	
Level 21	118	
Level 22	123	
Level 23	127	
Level 24	132	
Level 25	137	**Default Level**
Level 26	142	
Level 27	146	
Level 28	151	
Level 29	156	
Level 30	**160**	

Climbmill:
1 step height = 6.1 inches = 15.5 cm
1 floor = 21 steps





Watts Table

Frame	30	AUR50	Models		Production Date		Production Stage		Applicant	R&D	Applicant
Test Equipment	3	Torsion Testing Machine	Testing Time		Magnetron System Specifications	2010 solenoid, ratio: ϕ 260 : 32					
Test Conditions	0	Room Temperature, normal Yiqiao Mountain Standard Test									
Test Purpose		Test new models. Testing Requirements: 60RPM when L1 < 50Watt, L30 > 250Watt, spacing between levels < 10Watt Watt Accuracy r ≦ 50Watt ±5W, >50Watt ± 10%									
Recorded as follows:		The measured data is distributed arithmetically									

			0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
PWM		watt rpm / level	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
560	L1	0	7	10	13	17	21	25	29	33	38	40	44	49	53	58	62	67	72	77	82	87	92	97	102	107	112	117
672	L2	1	8	11	15	20	25	29	34	39	45	48	54	59	64	70	75	81	87	93	99	105	111	117	124	130	136	142
784	L3	2	9	13	17	23	28	34	40	46	53	57	63	69	76	82	88	94	102	109	116	124	131	138	145	152	159	166
896	L4	3	10	14	19	25	32	38	45	52	60	65	72	79	87	94	101	108	117	125	134	142	150	158	166	174	183	191
1008	L5	4	10	16	21	28	35	42	50	58	67	73	81	90	98	106	114	122	132	141	151	160	169	178	188	197	206	215
1120	L6	5	11	17	24	31	39	47	56	65	74	82	91	100	109	118	127	136	147	158	168	178	188	199	209	219	229	240
1200	L7	6	12	19	26	34	42	51	61	71	82	90	100	110	120	130	140	150	162	174	185	196	208	219	230	242	253	264
1280	L8	7	13	20	28	37	46	55	66	77	89	98	109	120	131	142	153	164	177	190	202	215	227	239	252	264	276	289
1360	L9	8	14	22	30	39	49	60	71	84	96	107	119	130	142	154	166	178	192	206	219	233	246	260	273	286	300	313
1440	L10	9	15	23	32	42	53	64	77	90	104	115	128	141	153	166	179	192	207	222	236	251	265	280	294	309	323	338
1520	L11	10	16	25	34	45	57	68	82	96	111	123	137	151	164	178	192	206	223	238	254	269	285	300	316	331	347	362
1600	L12	11	16	26	36	48	60	73	87	103	118	132	146	161	176	190	205	219	238	254	271	287	304	320	337	354	370	387
1680	L13	12	17	27	38	51	64	77	93	109	125	140	156	171	187	202	218	233	253	270	288	306	323	341	358	376	394	411
1760	L14	13	18	29	40	53	67	81	98	115	133	148	165	181	198	214	231	247	268	286	305	324	342	361	380	398	417	436
1840	L15	14	19	30	42	56	71	86	103	122	140	157	174	191	209	226	244	261	283	302	322	342	362	381	401	421	441	460
1920	L16	15	20	32	45	59	74	90	109	128	147	165	183	202	220	238	257	275	298	319	339	360	381	402	422	443	464	485
2000	L17	16	21	33	47	62	78	94	114	134	154	173	193	212	231	250	270	289	313	335	356	378	400	422	444	466	487	509
2080	L18	17	22	35	49	65	81	99	119	141	162	182	202	222	242	262	283	303	328	351	374	397	419	442	465	488	511	534
2160	L19	18	22	36	51	67	85	103	124	147	169	190	211	232	253	274	296	317	343	367	391	415	439	463	486	510	534	558
2240	L20	19	23	38	53	70	88	107	130	153	176	198	220	242	264	286	309	331	358	383	408	433	458	483	508	533	558	583
2320	L21	20	24	39	55	73	92	112	135	160	184	207	230	253	276	299	321	344	373	399	425	451	477	503	529	555	581	607
2400	L22	21	25	40	57	76	96	116	140	166	191	215	239	263	287	311	334	358	388	415	442	469	496	523	551	578	605	632
2533	L23	22	26	42	59	79	99	120	146	172	198	223	248	273	298	323	347	372	403	431	459	488	516	544	572	600	628	656
2665	L24	23	27	43	61	81	103	125	151	179	205	232	257	283	309	335	360	386	418	447	477	506	535	564	593	622	652	681
2798	L25	24	28	45	63	84	106	129	156	185	213	240	267	293	320	347	373	400	433	463	494	524	554	584	615	645	675	705
2930	L26	25	29	46	66	87	110	134	162	191	220	248	276	304	331	359	386	414	448	480	511	542	573	605	636	667	698	730
3063	L27	26	29	48	68	90	113	138	167	198	227	257	285	314	342	371	399	428	463	496	528	560	593	625	657	690	722	754
3195	L28	27	30	49	70	93	117	142	172	204	235	265	294	324	353	383	412	442	478	512	545	579	612	645	679	712	745	779
3328	L29	28	31	51	72	95	120	147	177	210	242	273	304	334	364	395	425	456	493	528	562	597	631	666	700	734	769	803
3460	L30	29	32	52	74	98	124	151	183	217	249	282	313	344	376	407	438	469	508	544	579	615	650	686	721	757	792	828

A 30-Series Watts Table

Watts Table

Frame	A30	Models		Production Date		Production Stage	Applicant:	R&D	Applicant:	
Test Equipment:	Chun Yen Torsion Testing Machine		Testing Time:		Magnetron System Specifications	Magnetron Weight: 13.6KG, ratio: 360 : 37				
Test Conditions:										
Test Purpose:	The new ratio test									

Recorded as follows:

No Watts on 30 series (2017.09.14 JE)

watt / rpm ECB	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0	5	8	12	16	22	27	35	42	48	54	64	74	83	91	101	110	121	131	139	146	154	161	167	172	192	212
52	6	9	14	19	26	33	42	50	58	66	78	89	101	113	122	131	146	160	171	182	191	200	209	218	240	262
79	7	11	17	22	30	38	48	58	67	76	90	104	118	132	144	155	170	184	196	208	220	232	242	251	275	298
97	8	13	19	26	35	44	56	67	78	88	104	119	135	151	164	176	196	215	229	242	253	263	276	289	316	342
113	9	14	22	29	40	50	63	75	87	98	116	134	152	170	185	200	220	240	255	270	284	297	312	327	356	385
128	10	16	24	32	44	56	70	83	97	111	130	149	168	187	203	218	242	266	284	301	315	329	346	362	393	423
140	11	18	26	35	48	61	77	92	108	123	144	164	186	207	228	248	271	294	313	332	345	358	377	396	429	462
153	12	19	29	39	53	67	85	102	118	134	157	179	205	230	248	265	293	321	343	365	380	395	413	431	462	492
164	12	21	31	42	57	72	90	108	127	145	170	194	218	241	263	284	312	340	361	381	401	420	437	453	481	509
173	14	22	33	45	62	78	98	117	135	152	181	209	236	263	286	309	340	370	390	410	429	447	469	490	521	552
183	15	24	37	49	67	85	106	127	147	167	196	224	253	281	308	335	369	402	422	441	458	475	499	523	558	593
192	16	26	39	52	72	91	113	135	157	178	209	239	271	302	328	354	389	424	444	463	483	502	530	557	590	623
200	18	29	42	56	76	95	119	143	165	187	221	254	289	323	348	373	405	437	461	484	508	532	558	583	615	646
212	19	31	45	59	80	100	125	150	174	197	233	269	299	329	360	391	422	452	479	506	527	547	575	603	630	656
223	20	33	48	63	85	107	136	164	187	210	247	284	321	357	390	422	458	494	523	552	573	594	617	640	669	698
234	22	35	52	68	92	115	144	173	198	222	261	299	335	371	409	446	483	520	550	580	604	628	655	681	703	725
245	23	38	54	71	97	123	154	185	212	238	276	314	352	390	431	471	510	548	576	603	627	651	676	701	731	760
258	24	40	57	75	102	129	162	195	225	254	292	329	371	413	451	489	535	580	605	630	653	675	704	733	763	792
272	26	42	60	78	107	136	172	208	239	270	311	352	398	444	487	530	573	615	644	672	696	719	750	780	814	848
286	27	44	69	93	125	156	197	237	278	318	343	367	445	522	566	610	662	713	752	790	821	852	885	917	969	1021

Watts Table

Frame	U30/R30	Models			Production date					Production Stage			Applicant:		R&D		Applicant:	
Test Equipment:				Testing Time:				Magnetron System Specifications				Magnetron Weight:10.5KG, ratio:260:35						
Test Conditions:																		
Test Purpose:																		
Recorded as follows:																		

watt rpm / ECB	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0	6	10	13	17	21	27	32	39	45	52	58	67	75	82	91	100	109	119	127	138	148	159	167	175	183
48	8	12	16	21	26	32	38	46	54	62	69	81	90	100	110	123	136	146	156	168	177	191	204	213	220
73	9	14	18	25	31	38	45	54	65	73	81	95	108	118	129	144	156	171	183	193	206	223	239	250	260
94	11	16	21	29	36	44	52	64	75	84	93	108	122	137	151	166	181	197	212	225	238	257	275	287	301
110	12	18	24	32	39	50	59	73	85	95	105	121	139	155	172	189	205	224	240	254	266	289	309	324	340
122	13	20	27	35	43	55	66	80	94	105	116	135	153	172	190	209	227	247	266	282	297	320	343	357	371
133	15	22	29	39	47	59	71	87	103	117	128	150	169	189	209	231	250	271	290	309	325	352	374	391	405
144	16	24	32	42	52	66	79	96	115	128	140	163	185	207	231	253	275	296	317	340	361	386	411	426	441
154	17	26	35	46	56	71	86	105	124	138	152	176	200	226	251	275	299	321	343	369	395	418	441	459	476
164	19	28	38	50	61	77	93	114	136	149	164	190	216	245	273	298	322	347	372	402	430	453	475	494	512
173	20	31	41	54	65	83	100	124	147	160	175	205	236	264	292	320	348	372	394	430	463	486	510	529	547
181	22	33	45	58	70	89	107	133	156	172	187	219	250	281	308	339	370	397	423	457	486	512	538	561	582
195	23	36	50	63	76	97	117	142	166	183	199	233	267	299	331	363	393	424	454	486	517	546	571	594	620
208	24	40	56	69	82	103	125	151	177	194	211	248	283	318	351	385	419	451	481	515	547	576	604	627	652
219	26	43	61	74	87	110	132	160	187	205	223	262	300	335	370	407	443	474	504	539	574	605	634	659	683
230	27	46	66	79	92	116	140	169	197	216	234	277	317	354	389	426	463	498	530	568	605	635	665	690	715
241	28	49	71	84	96	122	147	177	208	228	246	290	332	371	409	448	486	521	555	596	633	664	693	723	750
253	29	52	75	88	101	128	153	186	219	239	258	303	347	386	424	463	503	542	578	621	659	686	716	748	777
272	30	54	78	91	104	132	159	194	228	249	270	318	365	405	443	485	526	565	604	647	685	714	738	772	803
300	31	55	79	92	105	133	161	197	232	258	282	328	373	413	452	497	539	581	621	666	710	735	760	793	830

No Watts on 30 series
(2017.09.14 JE)

Watts Table

Frame	30	Andes8	Models	EP267	Production Date		Production Stage		Applicant:	R&D	Applicant:
Test Equipment:	3	Torsion testing machine	testing time:		Magnetron System Specifications	2010 solenoid, ratio: ϕ 260 : 32					
Test Conditions:	0	Room temperature, normal Yiqiao Mountain Standard Test									
Test Purpose:		Testing Requirements: 60 RPM when L1 < 50W att, L30 > 250W att, spacing between levels < 10W att accuracy:. ≦ 50W att ± 5W ≥ 50W att ± 10%									
Recorded as follows:		The measured data distributed arithmetic finishing table (among program algorithm)									

			0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
PWM		watt rpm / level	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
560	L1	0	7	10	13	17	21	25	29	33	38	40	44	49	53	58	62	67	72	77	82	87	92	97	102	107	112	117
672	L2	1	8	11	15	20	25	29	34	39	45	48	54	59	64	70	75	81	87	93	99	105	111	117	124	130	136	142
784	L3	2	9	13	17	23	28	34	40	46	53	57	63	69	76	82	88	94	102	109	116	124	131	138	145	152	159	166
896	L4	3	10	14	19	25	32	38	45	52	60	65	72	79	87	94	101	108	117	125	134	142	150	158	166	174	183	191
1008	L5	4	10	16	21	28	35	42	50	58	67	73	81	90	98	106	114	122	132	141	151	160	169	178	188	197	206	215
1120	L6	5	11	17	24	31	39	47	56	65	74	82	91	100	109	118	127	136	147	158	168	178	188	199	209	219	229	240
1200	L7	6	12	19	26	34	42	51	61	71	82	90	100	110	120	130	140	150	162	174	185	196	208	219	230	242	253	264
1280	L8	7	13	20	28	37	46	55	66	77	89	98	109	120	131	142	153	164	177	190	202	215	227	239	252	264	276	289
1360	L9	8	14	22	30	39	49	60	71	84	96	107	119	130	142	154	166	178	192	206	219	233	246	260	273	286	300	313
1440	L10	9	15	23	32	42	53	64	77	90	104	115	128	141	153	166	179	192	207	222	236	251	265	280	294	309	323	338
1520	L11	10	16	25	34	45	57	68	82	96	111	123	137	151	164	178	192	206	223	238	254	269	285	300	316	331	347	362
1600	L12	11	16	26	36	48	60	73	87	103	118	132	146	161	176	190	205	219	238	254	271	287	304	320	337	354	370	387
1680	L13	12	17	27	38	51	64	77	93	109	125	140	156	171	187	202	218	233	253	270	288	306	323	341	358	376	394	411
1760	L14	13	18	29	40	53	67	81	98	115	133	148	165	181	198	214	231	247	268	286	305	324	342	361	380	398	417	436
1840	L15	14	19	30	42	56	71	86	103	122	140	157	174	191	209	226	244	261	283	302	322	342	362	381	401	421	441	460
1920	L16	15	20	32	45	59	74	90	109	128	147	165	183	202	220	238	257	275	298	319	339	360	381	402	422	443	464	485
2000	L17	16	21	33	47	62	78	94	114	134	154	173	193	212	231	250	270	289	313	335	356	378	400	422	444	466	487	509
2080	L18	17	22	35	49	65	81	99	119	141	162	182	202	222	242	262	283	303	328	351	374	397	419	442	465	488	511	534
2160	L19	18	22	36	51	67	85	103	124	147	169	190	211	232	253	274	296	317	343	367	391	415	439	463	486	510	534	558
2240	L20	19	23	38	53	70	88	107	130	153	176	198	220	242	264	286	309	331	358	383	408	433	458	483	508	533	558	583
2320	L21	20	24	39	55	73	92	112	135	160	184	207	230	253	276	299	321	344	373	399	425	451	477	503	529	555	581	607
2400	L22	21	25	40	57	76	96	116	140	166	191	215	239	263	287	311	334	358	388	415	442	469	496	523	551	578	605	632
2533	L23	22	26	42	59	79	99	120	146	172	198	223	248	273	298	323	347	372	403	431	459	488	516	544	572	600	628	656
2665	L24	23	27	43	61	81	103	125	151	179	205	232	257	283	309	335	360	386	418	447	477	506	535	564	593	622	652	681
2798	L25	24	28	45	63	84	106	129	156	185	213	240	267	293	320	347	373	400	433	463	494	524	554	584	615	645	675	705
2930	L26	25	29	46	66	87	110	134	162	191	220	248	276	304	331	359	386	414	448	480	511	542	573	605	636	667	698	730
3063	L27	26	29	48	68	90	113	138	167	198	227	257	285	314	342	371	399	428	463	496	528	560	593	625	657	690	722	754
3195	L28	27	30	49	70	93	117	142	172	204	235	265	294	324	353	383	412	442	478	512	545	579	612	645	679	712	745	779
3328	L29	28	31	51	72	95	120	147	177	210	242	273	304	334	364	395	425	456	493	528	562	597	631	666	700	734	769	803
3460	L30	29	32	52	74	98	124	151	183	217	249	282	313	344	376	407	438	469	508	544	579	615	650	686	721	757	792	828

Watts Table

Frame	LS13.0E/E9	Models	EP544-1US	Production Date		Production Stage	Applicant:	R&D	Applicant:	Xu Bowen
Test Equipment:	Chun Yen torsion testing machine		Testing Time:		Magnetron System Specifications	Magnetron Weight:13.6KG, ratio:360:37				
Test Conditions:										
Test Purpose:	The new ratio test									

Recorded as follows:

watt \ rpm / ECB	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0	5	8	12	16	22	27	35	42	48	54	64	74	83	91	101	110	121	131	139	146	154	161	167	172	192	212
52	6	9	14	19	26	33	42	50	58	66	78	89	101	113	122	131	146	160	171	182	191	200	209	218	240	262
79	7	11	17	22	30	38	48	58	67	76	90	104	118	132	144	155	170	184	196	208	220	232	242	251	275	298
97	8	13	19	26	35	44	56	67	78	88	104	119	135	151	164	176	196	215	229	242	253	263	276	289	316	342
113	9	14	22	29	40	50	63	75	87	98	116	134	152	170	185	200	220	240	255	270	284	297	312	327	356	385
128	10	16	24	32	44	56	70	83	97	111	130	149	168	187	203	218	242	266	284	301	315	329	346	362	393	423
140	11	18	26	35	48	61	77	92	108	123	144	164	186	207	228	248	271	294	313	332	345	358	377	396	429	462
153	12	19	29	39	53	67	85	102	119	134	157	179	205	230	248	265	293	321	343	365	380	395	413	431	462	492
164	12	21	31	42	57	72	90	108	126	145	170	194	218	241	263	284	312	340	361	381	401	420	437	453	481	509
173	14	22	33	45	62	78	98	117	135	152	181	209	235	263	286	309	340	370	390	410	429	447	469	490	521	552
183	15	24	37	49	67	85	106	127	147	167	196	224	253	281	308	335	369	402	422	441	458	475	499	523	558	593
192	16	26	39	52	72	91	113	135	157	178	209	239	271	302	328	354	389	424	444	463	483	502	530	557	590	623
200	18	29	42	56	76	95	119	143	165	187	221	254	289	323	348	373	405	437	461	484	508	532	558	583	615	646
212	19	31	45	59	80	100	125	150	174	197	233	269	299	329	360	391	422	452	479	506	527	547	575	603	630	656
223	20	33	48	63	85	107	136	164	187	210	247	284	321	357	390	422	458	494	523	552	573	594	617	640	669	698
234	22	35	52	68	92	115	144	173	198	222	261	299	335	371	409	446	483	520	550	580	604	628	655	681	703	725
245	23	38	54	71	97	123	154	185	212	238	276	314	352	390	431	471	510	548	576	603	627	651	676	701	731	760
258	24	40	57	75	102	129	162	195	225	254	292	329	371	413	451	489	535	580	605	630	653	675	704	733	763	792
272	26	42	60	78	107	136	172	208	239	270	311	352	398	444	487	530	573	615	644	672	696	719	750	780	814	848
286	27	44	69	93	125	156	197	237	278	318	343	367	445	522	566	610	662	713	752	790	821	852	885	917	969	1021

No Watts on 30 series
(2017.09.14 JE)

Watts Table

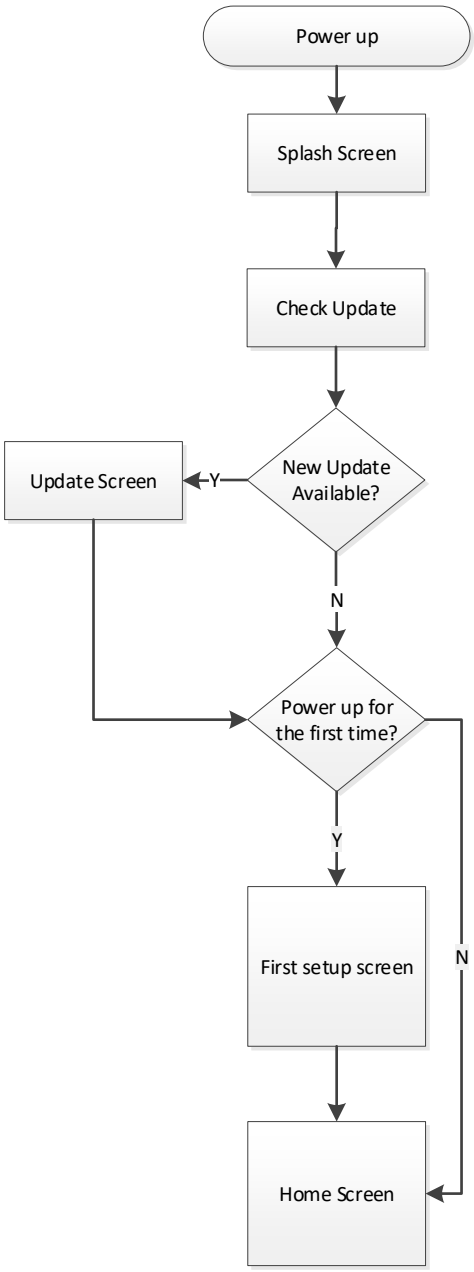
Frame	LS13.0E/E9	Models	EP544-1US	Production Date		Production Stage	Applicant:	R&D	Applicant:	Xu Bowen
Test Equipment:	Chun Yen torsion testing machine		Testing Time:		Magnetron System Specifications	Magnetron Weight: 13.6KG, ratio: 360:37				
Test Conditions:										
TestPurpose:	The new ratio test									

Recorded as follows:

watt / rpm ECB	15	20	25	30	35	40	45	50																		
0	5	8	12	16	22	27	3											95	100	105	110	115	120	125	130	135	140
52	6	9	14	19	26	33													131	139	146	154	161	167	172	192	212
79	7	11	17	22	30														0	171	182	191	200	209	218	240	262
97	8	13	19	26	3														4	196	208	220	232	242	251	275	298
113	9	14	22	29															215	229	242	253	263	276	289	316	342
128	10	16	24	32														220	240	255	270	284	297	312	327	356	385
140	11	18	26	35	4												8	242	266	284	301	315	329	346	362	393	423
153	12	19	29	39	53											248	271	294	313	332	345	358	377	396	429	462
164	12	21	31	42	57	7									248	265	293	321	343	365	380	395	413	431	462	492
173	14	22	33	45	62	78									1	263	284	312	340	361	381	401	420	437	453	481	509
183	15	24	37	49	67	85	1								263	286	309	340	370	390	410	429	447	469	490	521	552
192	16	26	39	52	72	91	113							53	281	308	335	369	402	422	441	458	475	499	523	558	593
200	18	29	42	56	76	95	119	1					9	271	302	328	354	389	424	444	463	483	502	530	557	590	623
212	19	31	45	59	80	100	125	150				33	254	289	323	348	373	405	437	461	484	508	532	558	583	615	646
223	20	33	48	63	85	107	136	164	1		9	247	269	299	329	360	391	422	452	479	506	527	547	575	603	630	656
234	22	35	52	68	92	115	144	173	198	222	261	284	321	357	390	422	458	494	523	552	573	594	617	640	669	698
245	23	38	54	71	97	123	154	185	212	238	276	299	335	371	409	446	483	520	550	580	604	628	655	681	703	725
258	24	40	57	75	102	129	162	195	225	254	292	314	352	390	431	471	510	548	576	603	627	651	676	701	731	760
272	26	42	60	78	107	136	172	208	239	270	311	329	371	413	451	489	535	580	605	630	653	675	704	733	763	792
286	27	44	69	93	125	156	197	237	278	318	343	352	398	444	487	530	573	615	644	672	696	719	750	780	814	848
												367	445	522	566	610	662	713	752	790	821	852	885	917	969	1021

Watts To Be Updated

Power startup screen
NEEDS UPDATING



LCD Splash Screen

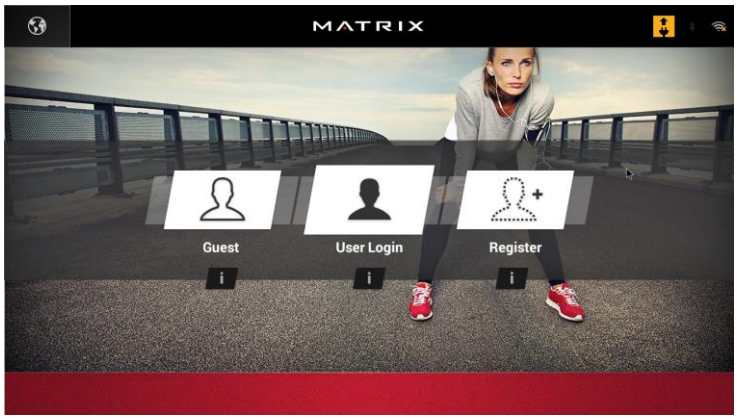
All the program flowcharts please refer to software definition library.

Splash screen

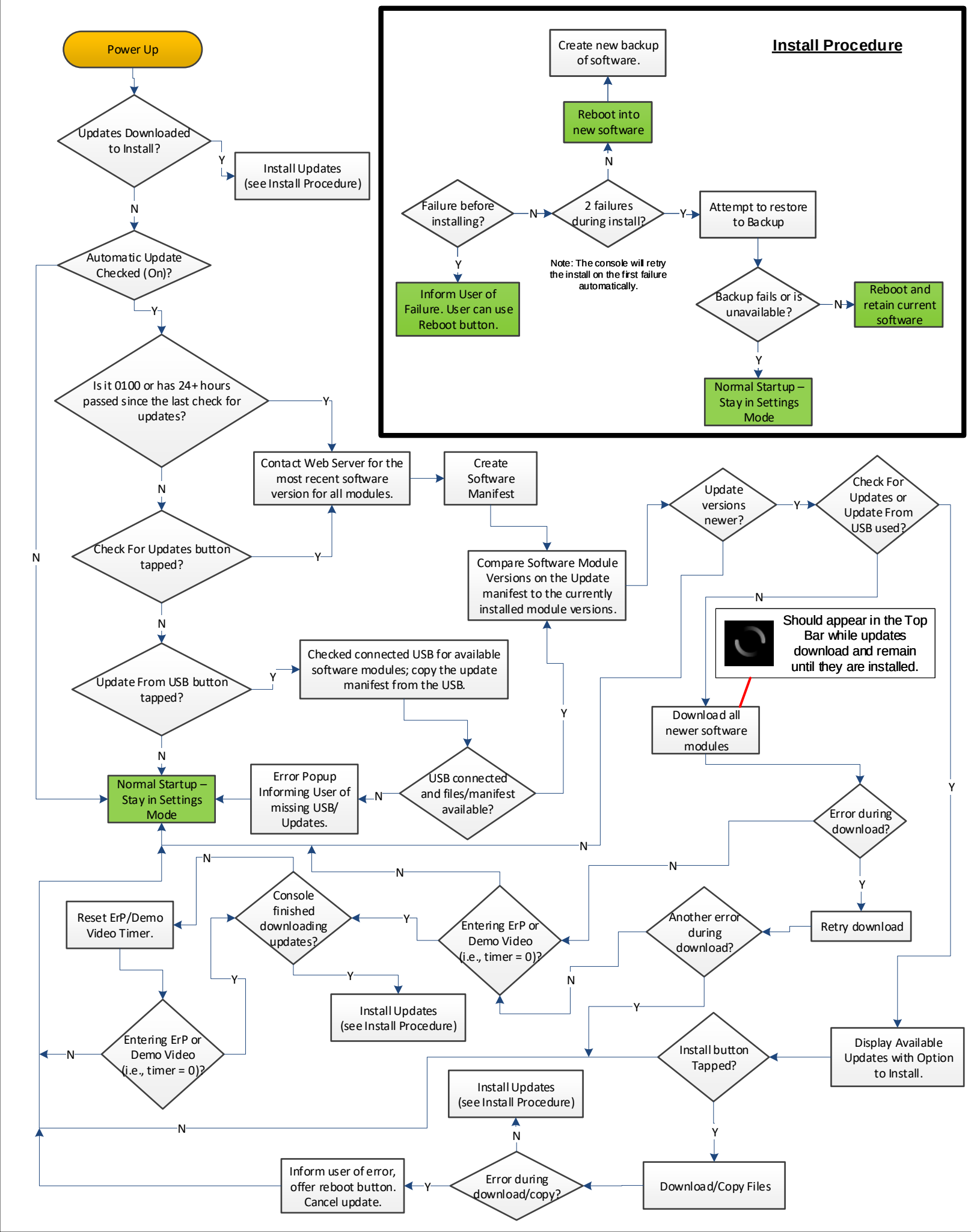
Update Screen

Models selection screen

Welcome screen



RSCU – Console I



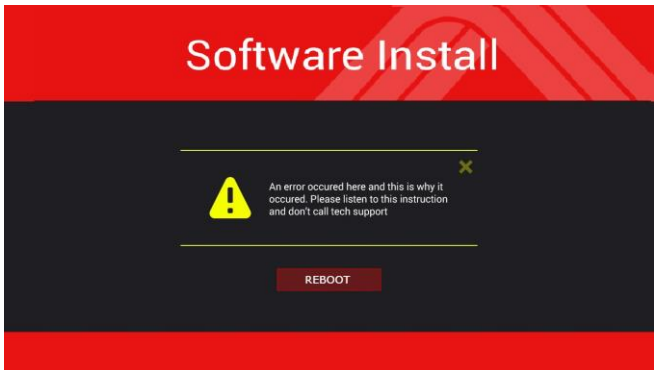
Update Setting Screen

No Updates

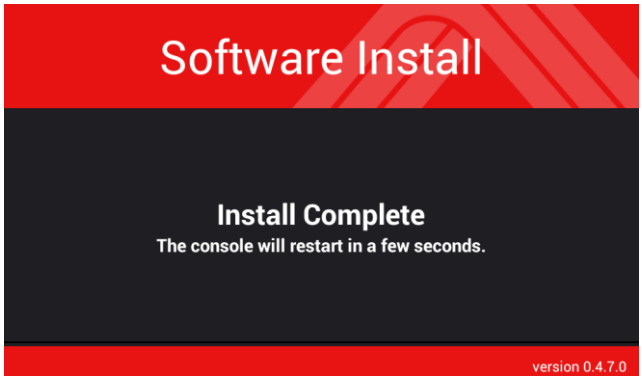
Download and Install Software Screen

Updates Available

Install Error



Install Complete



RSCU Summary

1 - Console checks for updates based on the time-of-day/24-hour check cycle.
2 - If updates found then the spinner appears in the top bar and the console downloads updates.
    a - Spinner remains until updates are applied.
3 - While the console is downloading updates the ErP/Demo Timer will keep resetting when it reaches 0.
    a - Once the updates are downloaded the console will enter the update screen when the ErP/Demo Timer reaches 0 on its current iteration.

Audio Control

Audio Source Protocol

Start the Workout

Launch App, go to Workout Home Screen or plug device into AUX input (Audio Line-in)

Plugged device into AUX input?

Y → AUX input becomes the current sound source.

N → Media Player the current audio source and playing music?

Previous Audio Playing?

N → AUX input becomes the current sound source.

Y → My Media App playing music?

Y → Media Player pauses.

N → Previous App continues to play.

So if My Media is playing a video it keeps playing.

Other Audio Source Selected?

Y → That source becomes the new audio source. If My Media then playback resumes.

N → Device unplugged from AUX input?

Y → Previous Audio Source is selected if there was one available. If My Media then playback resumes.

N → AUX input becomes the current sound source.

Media Player the current audio source and playing music?

Y → Launched App Plays or Loads Sound?

Y → Launched App becomes the current sound source. Media Player pauses if it was playing.

Media Player selected as sound source?

Y → Media Player becomes the current sound source. Media Player should start playing where it left off.

N → Launched App becomes the current sound source. Media Player pauses if it was playing.

N → Media Player remains the sound source.

Note: If the launched app is the Media Player it should just keep playing.

N → Previous App played sound?

Y → Previous App's sound stops playing. App is paused/ suspended.

Previous App Sprint 8?

Y → Workout continues, if Coach Phil Audio/Video is running it is closed and the Audio/Video button is removed until the next recovery segment.

N → Previous App Virtual Active?

Y → Workout continues, Virtual Active keeps track of the user's position in the course and updates to the correct segment if the Virtual Active App is reopened.

N → Previous App Media Player and playing a video?

Y → Workout continues, Media Player pauses video and retains user's place in the video. If the Media Player is reopened during the workout it will open to the video playback screen and the user can start playback again where they left off.

N → Previous App's sound stops playing. App is paused/ suspended.

N → Launched App Plays or Loads Sound?

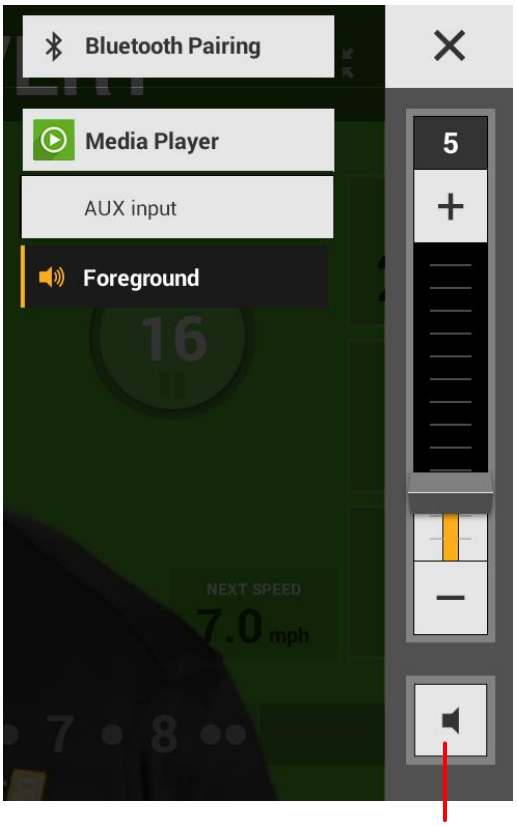
Y → Device plugged into AUX input and it's the current sound source?

Y → AUX input remains the sound source until the user selects the App as the sound source.

N → Launched App becomes the current sound source.

N → No sound source selected.

Audio Source Select Menu



Mute Behavior

1 - If Mute is tapped when there is volume the volume is muted.
2 - If Mute is tapped when volume is already muted then it returns to the previous volume.
3 – If '+' is tapped while volume is muted then volume will adjust from 0.

Audio Out Protocol

Start the Workout

Headphones plugged into Audio Out?

Y → Speakers off, audio only out of headphones: Bluetooth and/or Audio Out.

N → Bluetooth Headphones Connected?

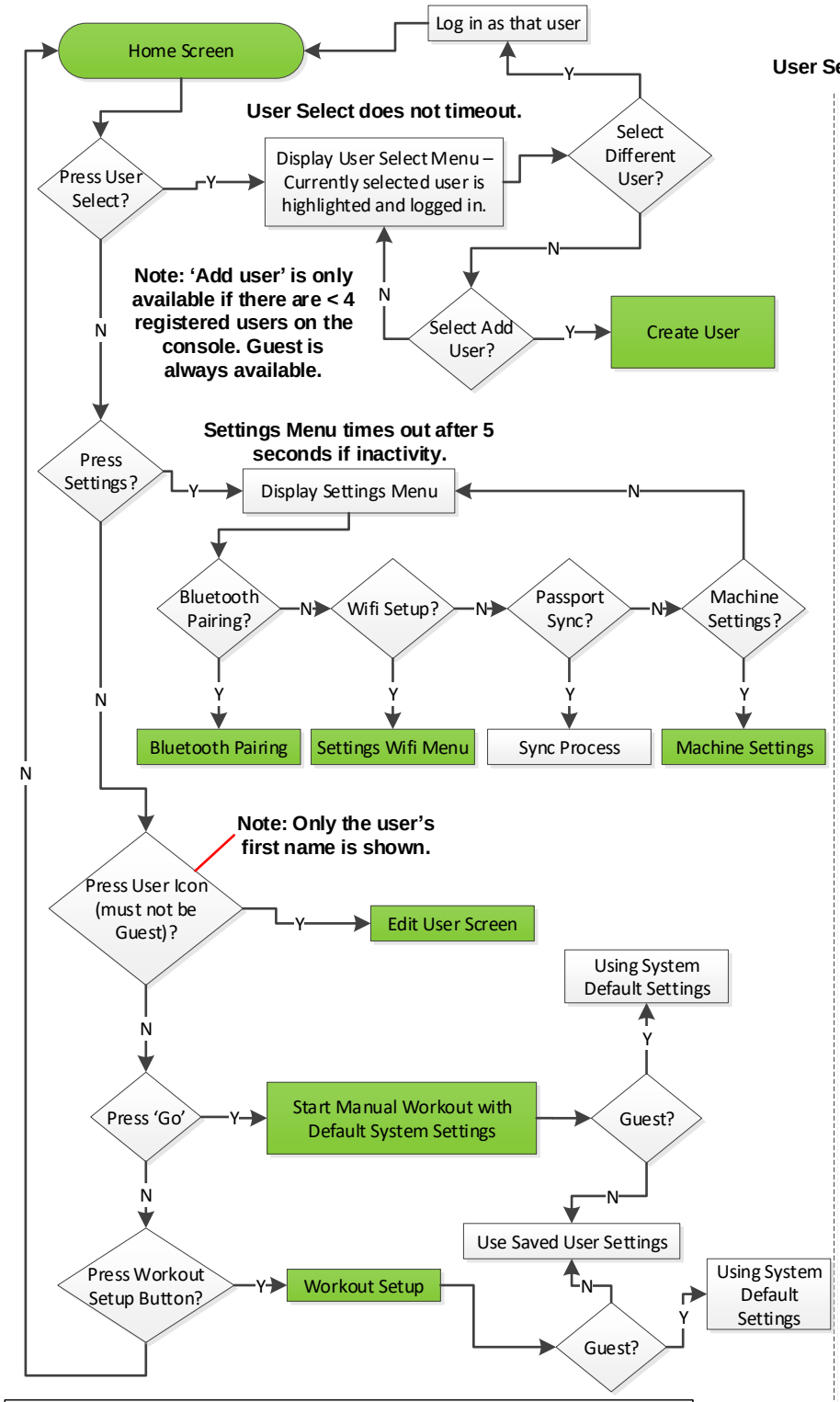
Y → Speakers off, audio only out of headphones: Bluetooth and/or Audio Out.

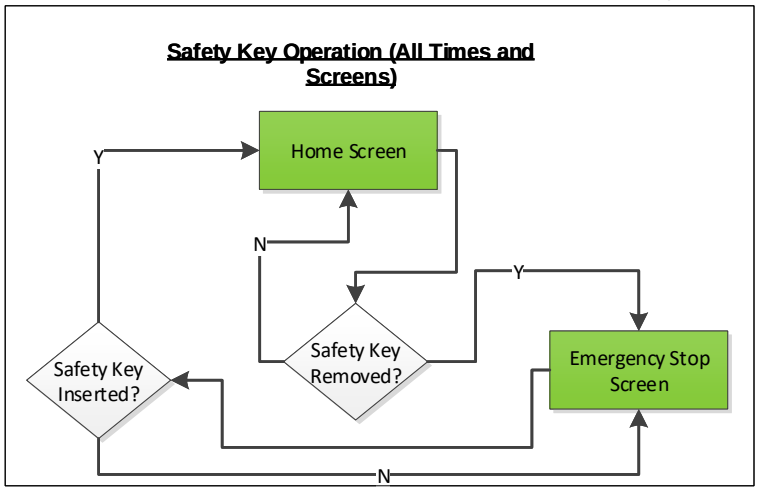
N → Audio out of speakers

Note: This switch of audio out does pause playback.

Standard Apps (On Console)	xer	xir	Network Connectivity	Notes/Questions/Details
Track	✓	✓	Not Required	
Virtual Active	✓	✓	Not Required	
Heart Rate	✓	✓	Not Required	Heart Rate app not available on Target Heart Rate program
Change Workout	✓	✓	Not Required	
Simple	✓	✓	Not Required	
My Media	x	✓	Not Required	
Target Heart Rate (program specific)	✓	✓	Not Required	Target Heart rate app available only on Target Heart Rate Program
Landmarks (program specific)	✓	✓	Not Required	Landmarks app available only on Landmarks Program
Sprint 8 (program specific)	✓	✓	Not Required	Sprint 8 app available only on Sprint 8 Program
Web-Connected Apps	**xer**	**xir**	**Network Connectivity**	**Notes/Questions/Details**
Facebook	✓	✓	Required	
Twitter	✓	✓	Required	
MyFitness Pal	✓	✓	Required	
YouTube	✓	✓	Required	
Weather	✓	✓	Required	
Web Browser	x	✓	Required	
Hulu+	✓	✓	Required	
Netflix	✓	✓	Required	
mPOWER/VIAfit	✓	✓	Required	Only through Viafitness.com

Welcome/Go Screen





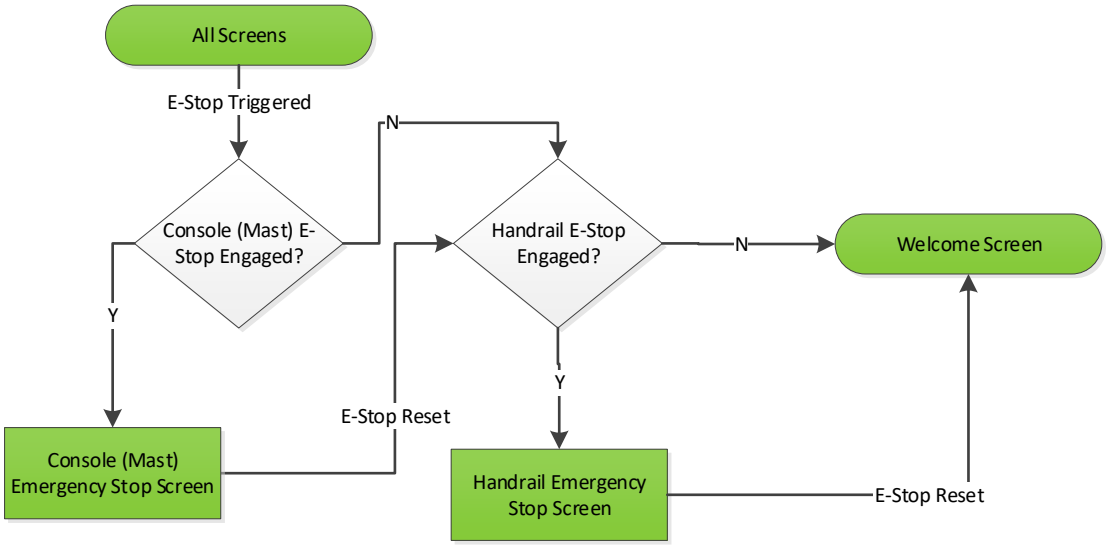
Home Screen

Emergency Stop Screen

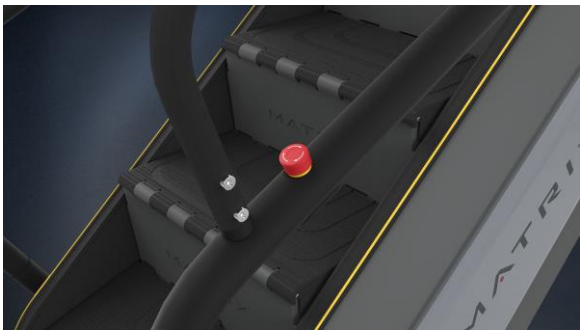
User Select

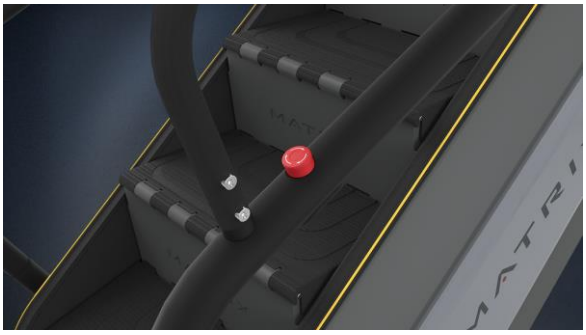
Settings

Climbmill E-Stop Behavior



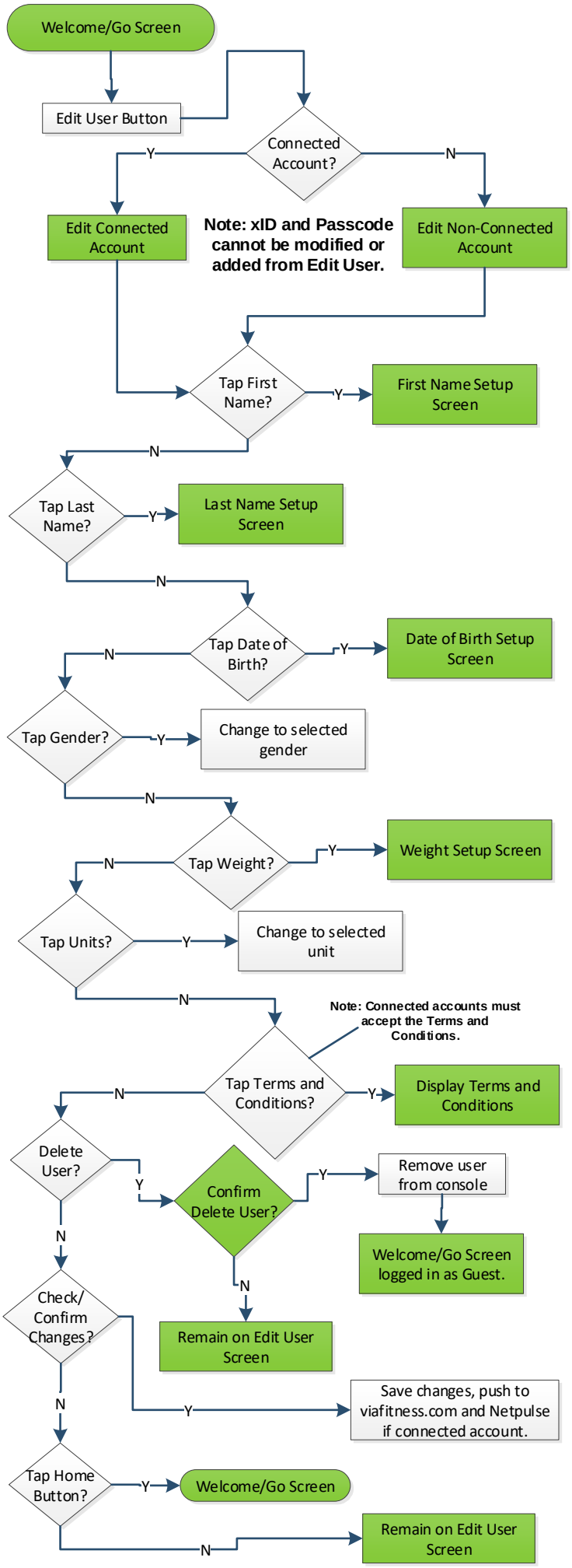
Handrail Emergency Stop Screen





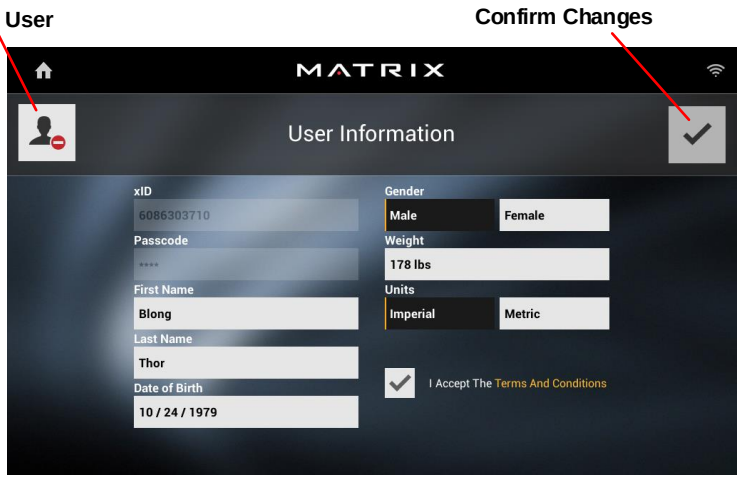
Console (Mast) Emergency Stop Screen

Edit User

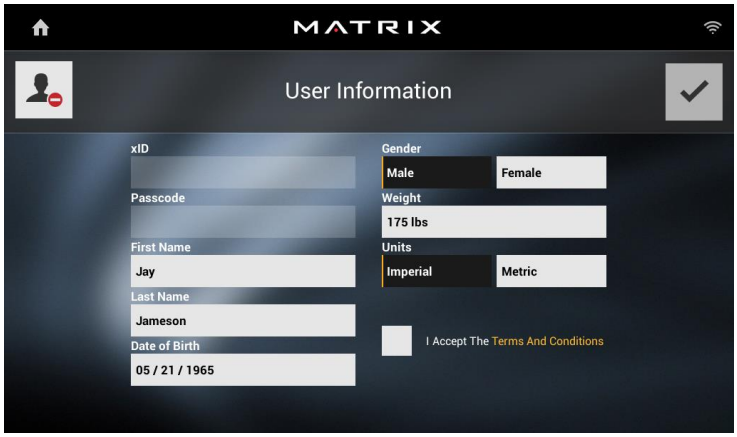


Welcome/Go Screen with User

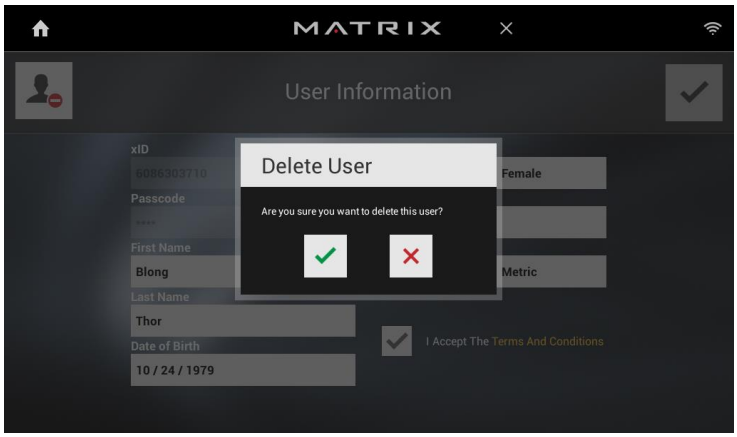
Edit Connected Account



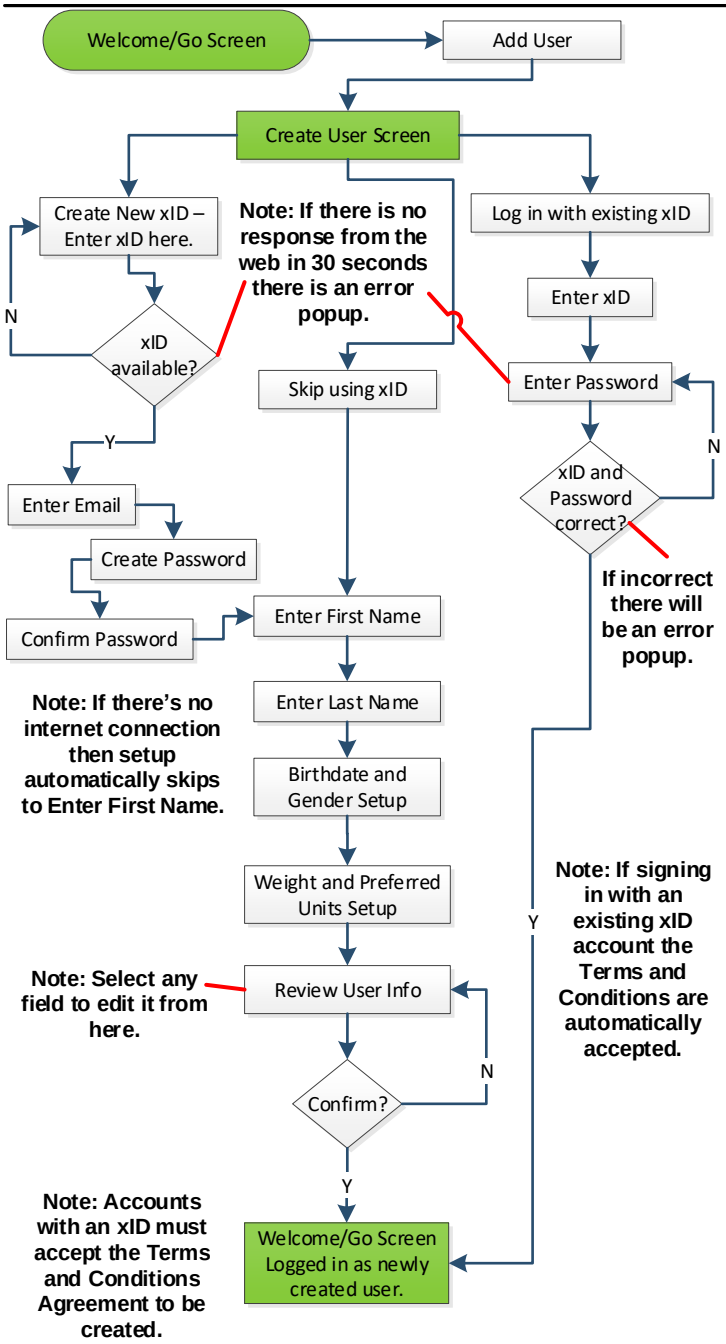
Edit Non-Connected Account



Confirm Delete User



Create User



Press to go back to the previous screen

Press to skip to the next screen

Press to confirm and go to the next screen.

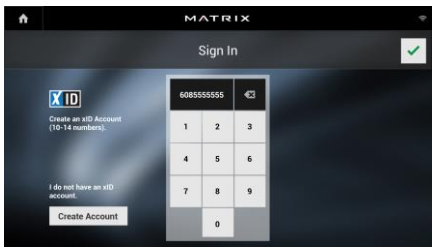
Necessary information not yet entered or valid.

Tapping this unchecks the accept box

Tapping this checks the accept box

Terms and Conditions Agreement

Create User Screen



Create User with Existing xID

Enter Password

Create Password Screen

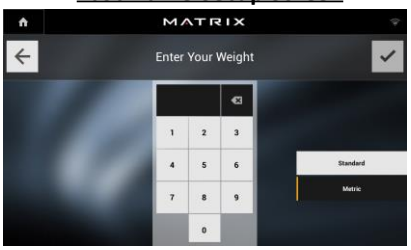
Confirm Password Screen

Enter Email Address Screen

First Name Setup Screen

Last Name Setup Screen

Birthdate and Gender Setup Screen



Weight and Units Setup Screen

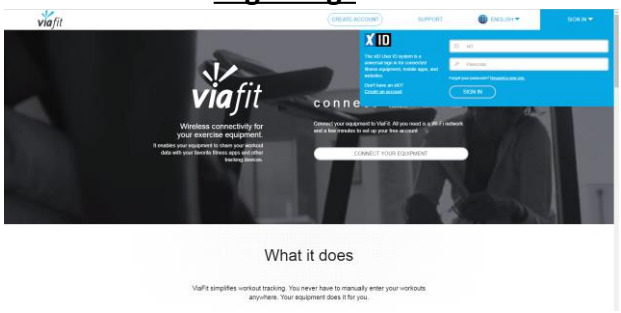
Review Information Connected User

Review Information Local User

Landing Page

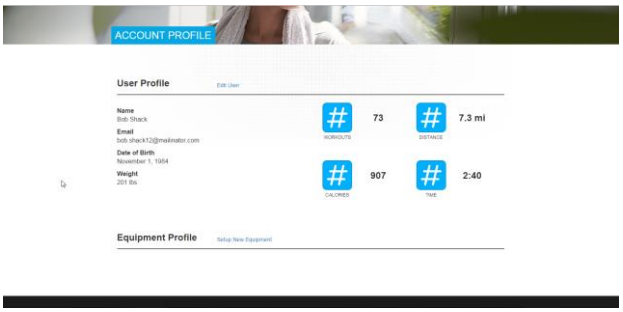
Accounts created or signed into on XIR/XER can be accessed online here.

Login Page



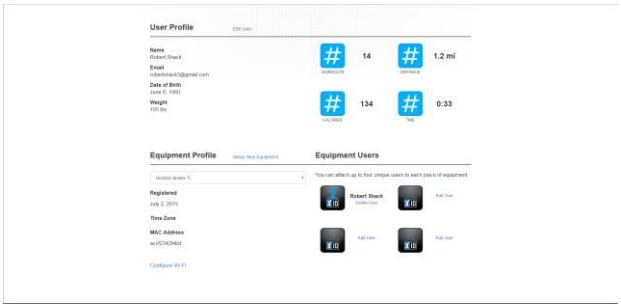
Login into your xID by clicking the option in the upper-right corner.

User Account Profile (no equipment)



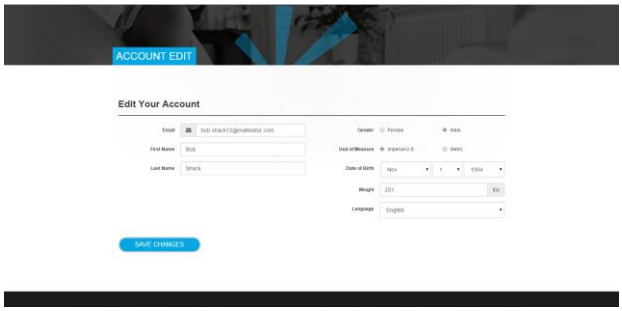
Even after deleting xID accounts for an XER/ XIR they are available online. You cannot delete an account from Viafitness.

User Account Profile (with equipment)

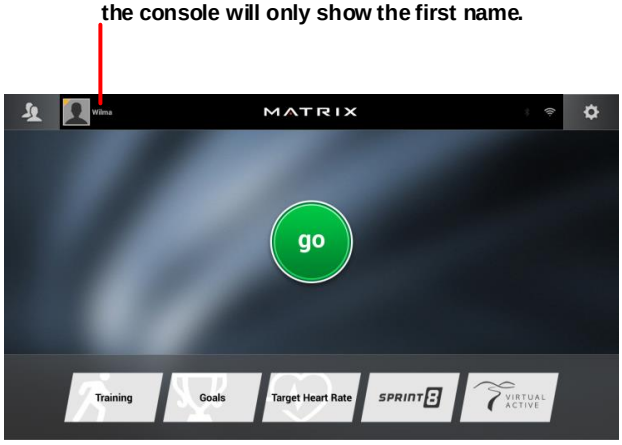


After logging into an XER/XIR, the machine will show up under the account. The machine is uniquely identified by its MAC Address.

Edit User Account



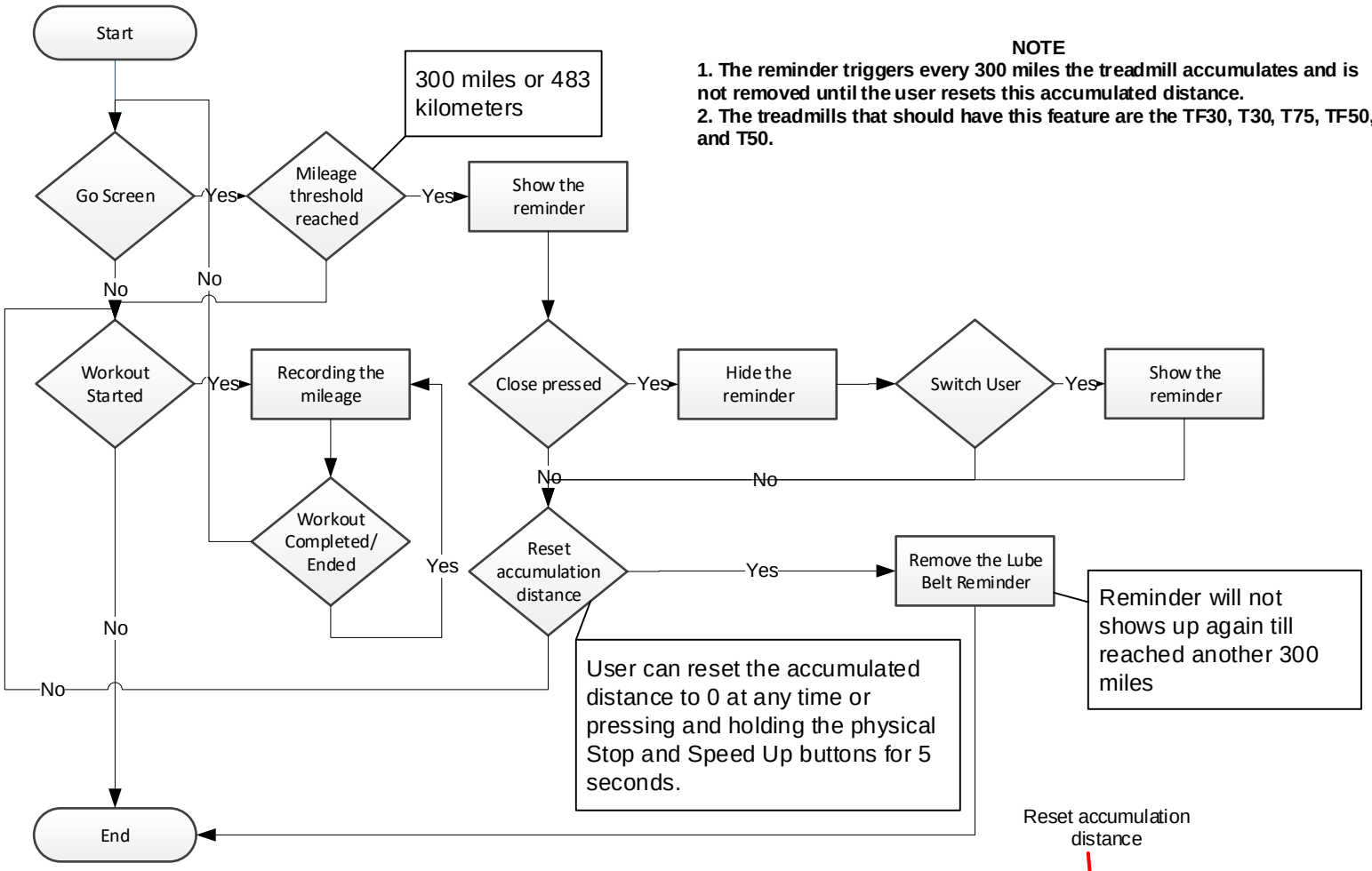
You can edit a user's settings, including email (can't do that on the console).
Note that Viafitness will show the full name of a user while the console will only show the first name.



Important

If the user's weight on Viafitness is set to outside the weight limits for the machine they are trying to login to then their login attempt will fail (popup will say login failed). The cases for this are the weight is too low, too high and negative.

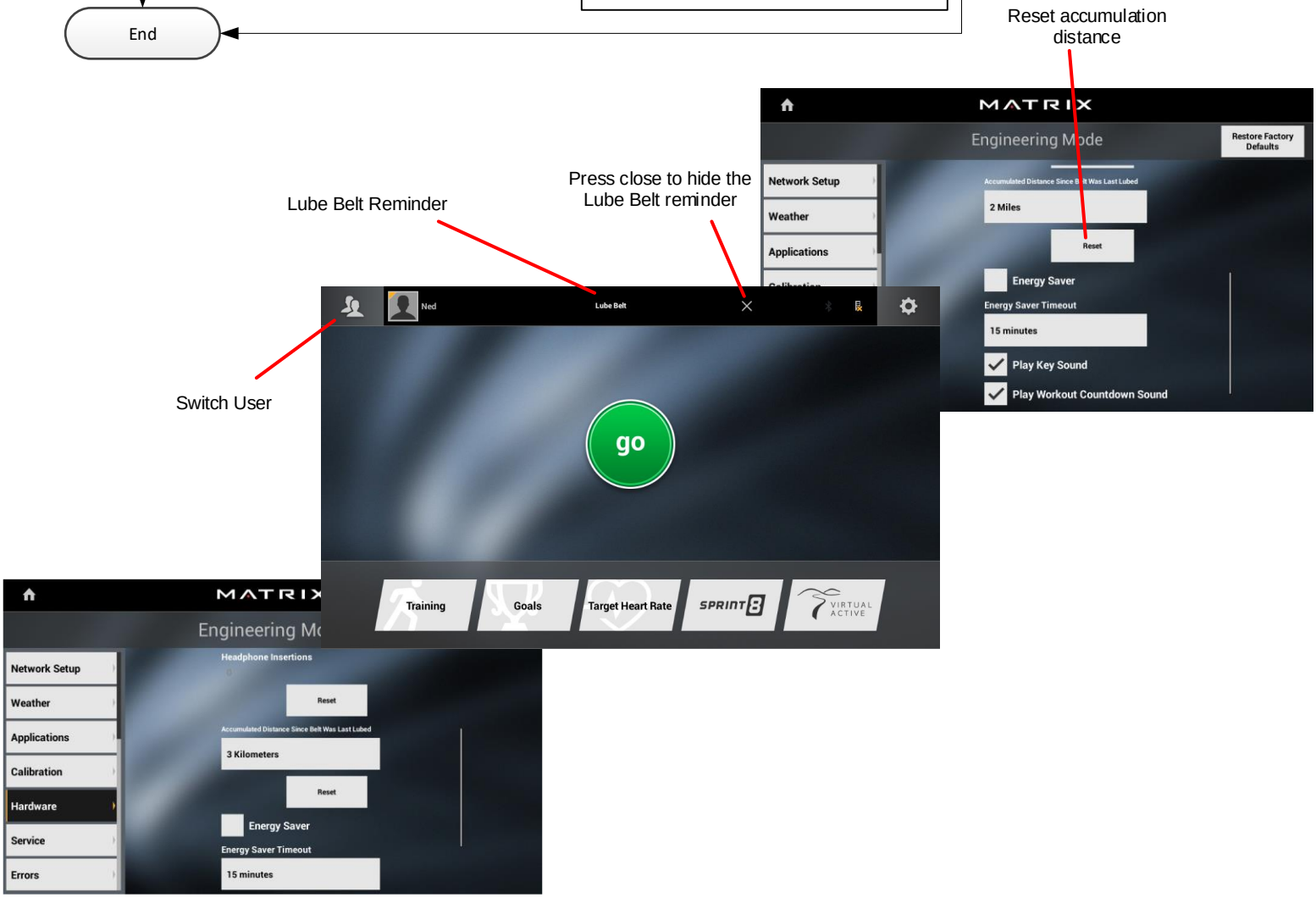
Lube Belt Reminder



NOTE

1. The reminder triggers every 300 miles the treadmill accumulates and is not removed until the user resets this accumulated distance.

2. The treadmills that should have this feature are the TF30, T30, T75, TF50, and T50.

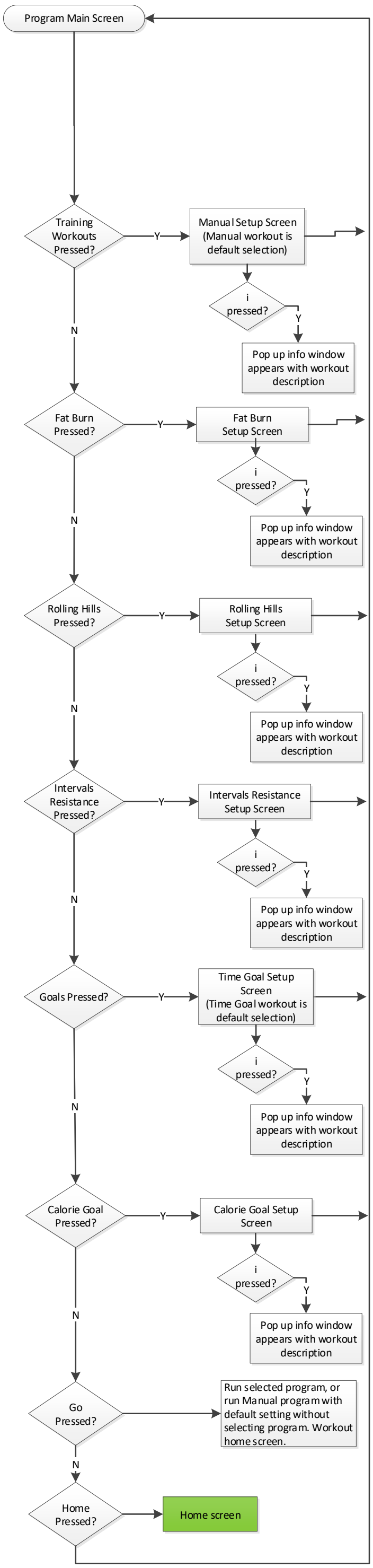


Values are displayed as MIN - MAX, DEFAULT
Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

	Frame
Workout	Climbmill (C)
THR(%) Incline	-
THR(%) Speed	-
THR(%) Resistance (Level)	X
Training - Manual	X
Training - Fat Burn	X
Training - Rolling Hills	X
Training - Intervals (Incline)	-
Training - Intervals (Resistance (Level))	X
Training - Constant Watts	-
Training - Glutes	-
Goal - Time	X
Goal - Distance	-
Goal - Calorie	X
Goal - Floors	X
Virtual Active	X
Sprint 8	-
Landmarks	X

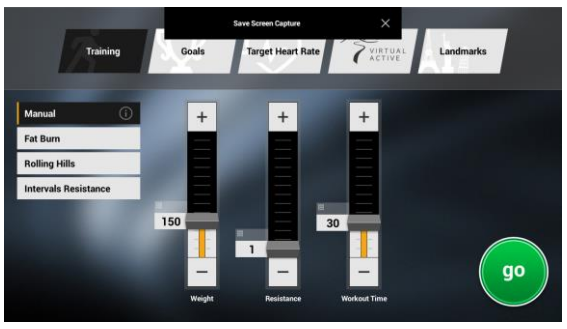
Climbmill (C) Inputs								
Age	% Max HR	Workout Time (minutes)	Weight (lbs)	Max Resistance/Speed (machine level)	Resistance/Speed (machine level)	Level (workout level)	Floors	Calories
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	1 - 25 (Settings Max), 1 (Always 1)	-	-	-	-
-	-	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	-	1 - 25 (Settings Max), 1 (Always 1)	-	-	-
-	-	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	-	-	1 - 20, 1 (Always 1)	-	-
-	-	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	-	-	1 - 20, 1 (Always 1)	-	-
-	-	-	-	-	-	-	-	-
-	-	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	-	-	1 - 20, 1 (Always 1)	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	-	1 - 25 (Settings Max), 1 (Always 1)	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	99 - 300, 150 (Settings Default)	-	1 - 25 (Settings Max), 1 (Always 1)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)
-	-	-	99 - 300, 150 (Settings Default)	-	1 - 25 (Settings Max), 1 (Always 1)	-	5 - 150 (Settings Max), 20 (Settings Default)	-
-	-	2 - 120 (Settings Max), 30 (Settings Default)	99 - 300, 150 (Settings Default)	-	-	1 - 20, 1 (Always 1)	-	-
-	-	-	-	-	-	-	-	-
-	-	-	99 - 300, 150 (Settings Default)	-	1 - 25 (Settings Max), 1 (Always 1)	-	-	-

Program Main Screen (C) - II

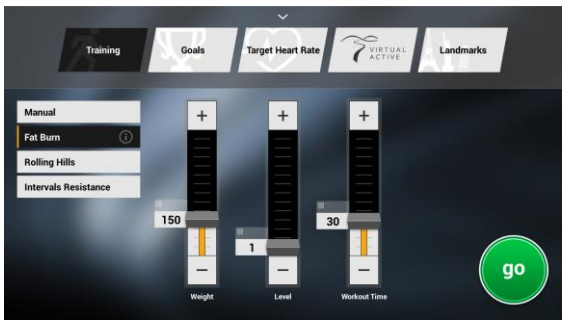


Program Main Screen

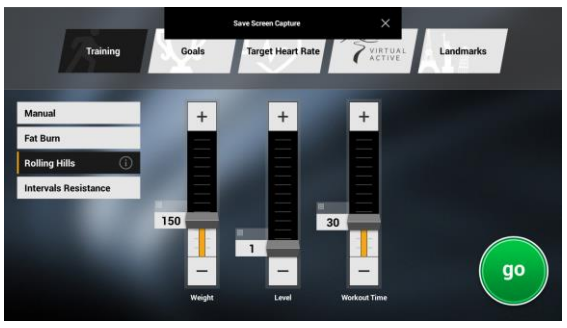
Manual Setup Screen



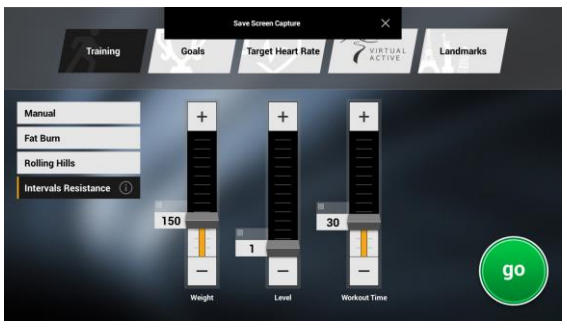
Fat Burn Setup Screen



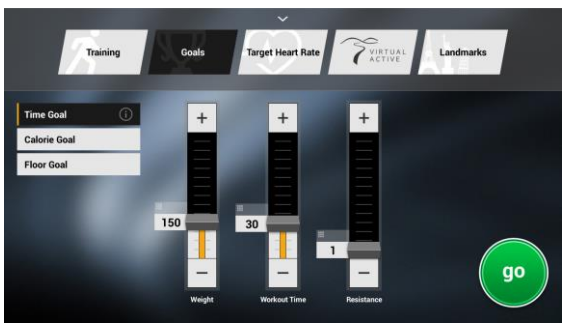
Rolling Hills Setup Screen



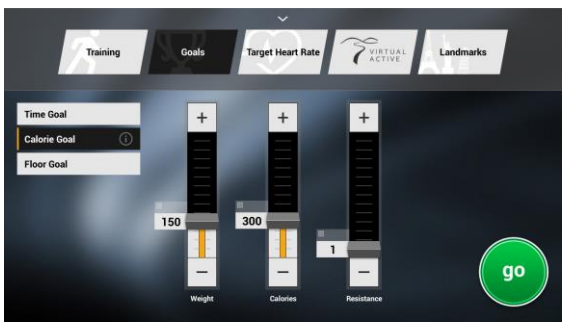
Intervals Resistance Setup Screen



Time Goal Setup Screen

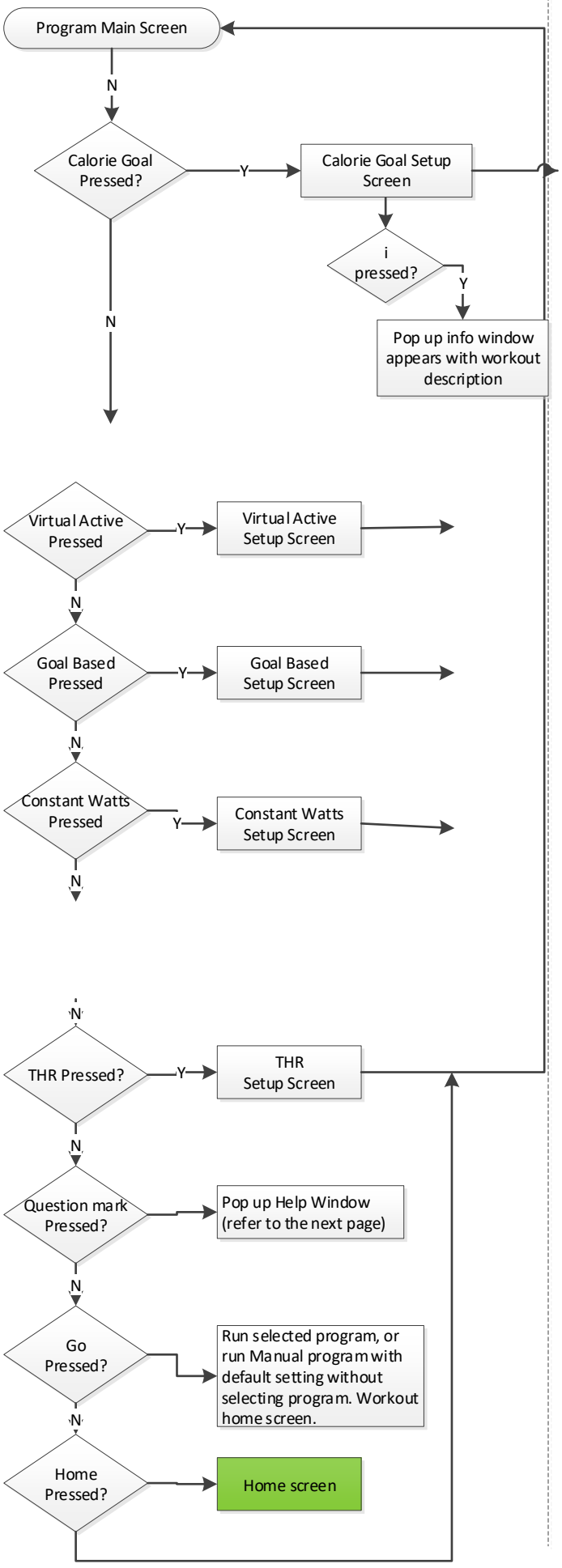


Calorie Goal Setup Screen

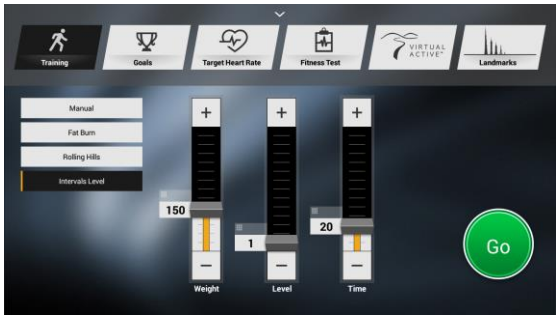


Continued on next page

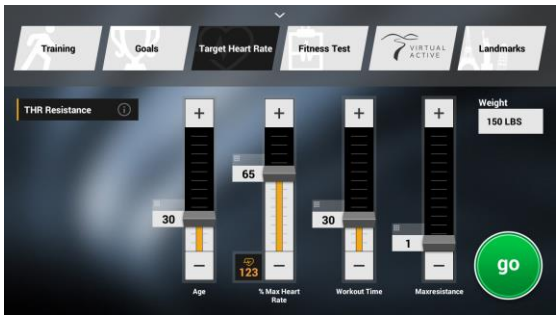
Program Main Screen (C) - III



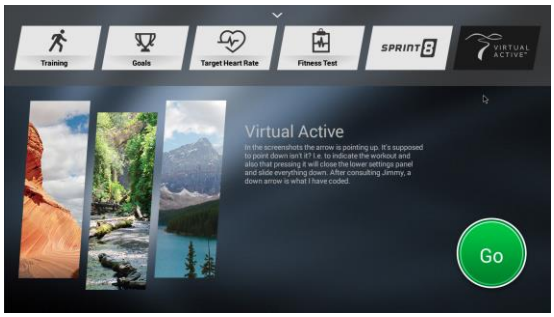
Training workouts Intervals Screen



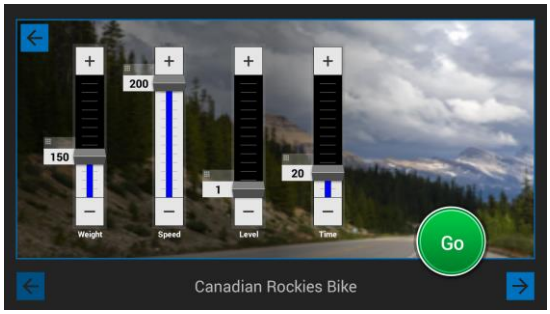
Target Heart Rate Setup Screen



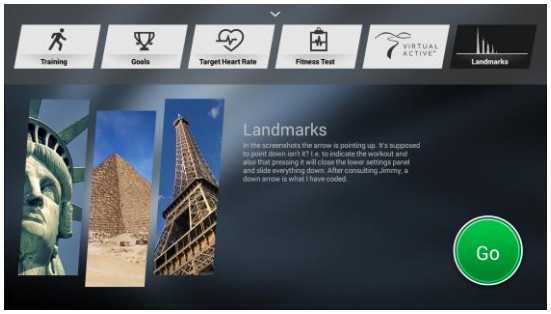
VA Setup I



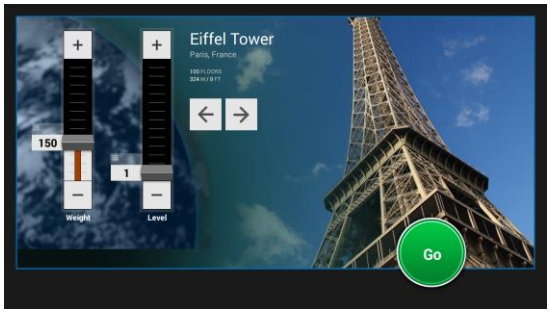
VA Setup II



Landmarks Setup I



Landmarks Setup II



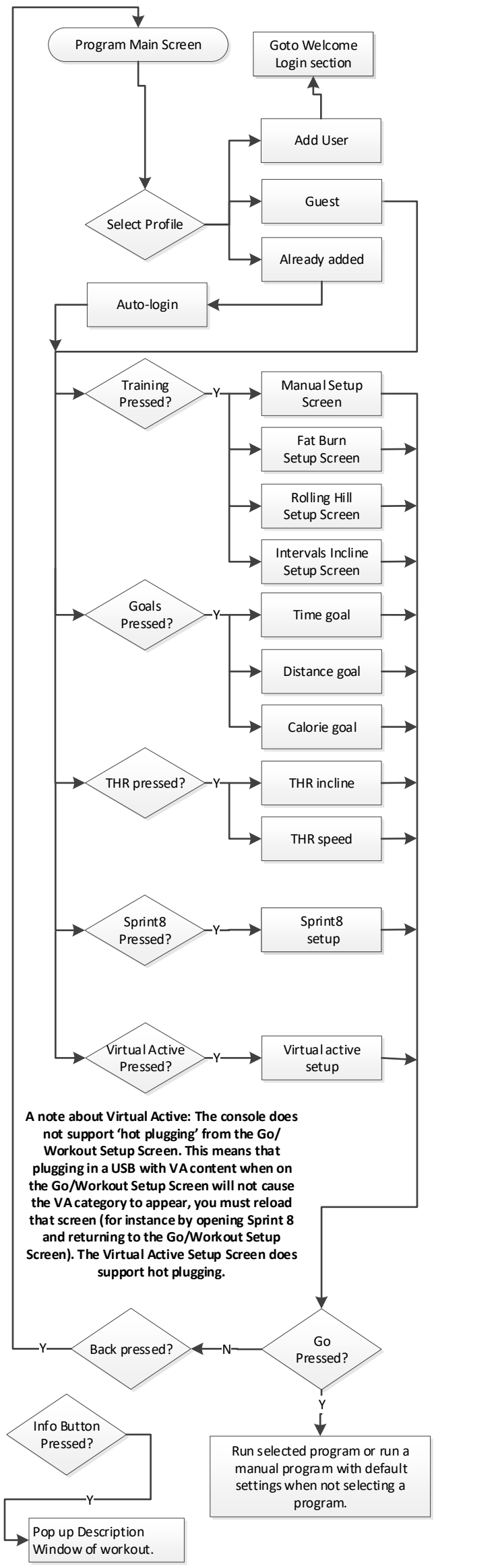
Program Main Screen (T)

Values are displayed as MIN - MAX, DEFAULT

Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

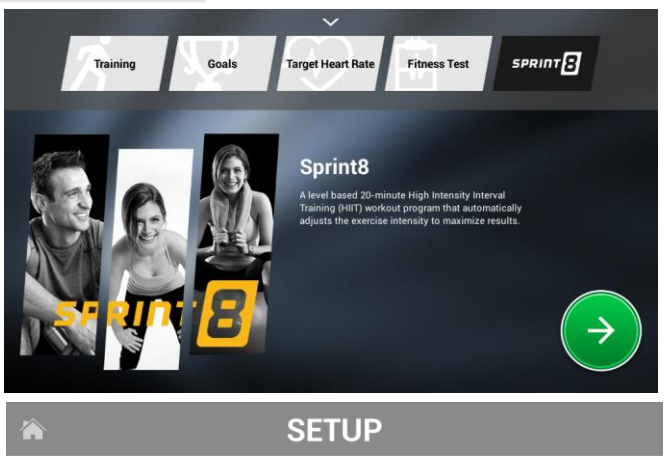
	Frame	Treadmill (T) Inputs											
Workout	**Treadmill (T)**	**Age**	**% Max HR**	**Workout Time (minutes)**	**Max Incline (% Grade)**	**Weight (lbs)**	**Max Speed (MPH)**	**Incline (% Grade)**	**Speed (MPH)**	**Level (workout level)**	**Distance (miles)**	**Calories**	**Media Type**
THR(%) Incline	**X**	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	0.0 - 15.0 (Settings Max), 0.0	50 - 400 (TF30 = 350), 150 (Settings Default)	-	-	-	-	-	-	-
THR(%) Speed	**X**	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 400 (TF30 = 350), 150 (Settings Default)	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	-	-	-	-	-	-
THR(%) Resistance (Level)	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Manual	**X**	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	0.0 - 15.0 (Settings Max), 0.0	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	-	-	-	-
Training - Fat Burn	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Rolling Hills	**X**	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	-	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	1 - 20, 1 (Settings Default)	-	-	-
Training - Intervals (Incline)	**X**	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	-	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	1 - 20, 1 (Settings Default)	-	-	-
Training - Intervals (Resistance (Level))	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Constant Watts	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Glutes	-	-	-	-	-	-	-	-	-	-	-	-	-
Goal - Time	**X**	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	0.0 - 15.0 (Settings Max), 0.0	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	-	-	-	-
Goal - Distance	**X**	-	-	-	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	0.0 - 15.0 (Settings Max), 0.0	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	**X**	-	-	-	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	0.0 - 15.0 (Settings Max), 0.0	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	**X**	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 400 (TF30 = 350), 150 (Settings Default)	-	-	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed)	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	**X**	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	-	0.0 - 15.0 (Settings Max), 0.0 Per Segment (Sprint + Recovery adjustable). Only in Custom.	0.5 (Machine Minimum) - 12.5 (Settings Max), 0.5 (Settings Start Speed) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

Program Main Screen (T) - II

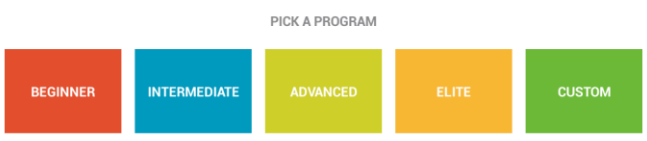


A note about Virtual Active: The console does not support 'hot plugging' from the Go/ Workout Setup Screen. This means that plugging in a USB with VA content when on the Go/Workout Setup Screen will not cause the VA category to appear, you must reload that screen (for instance by opening Sprint 8 and returning to the Go/Workout Setup Screen). The Virtual Active Setup Screen does support hot plugging.

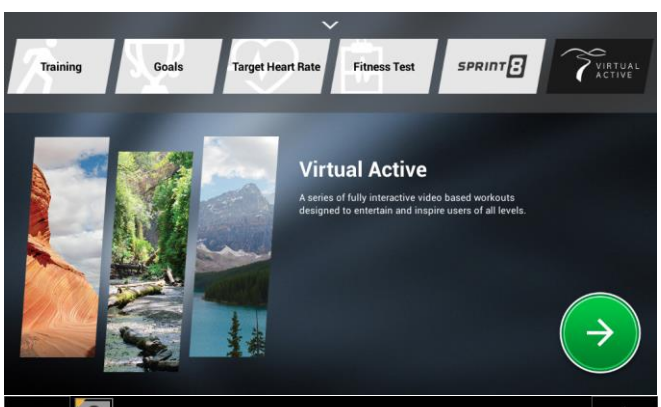
Sprint8 Start Screen



Sprint8 Setup Screen



Virtual Active Start screen

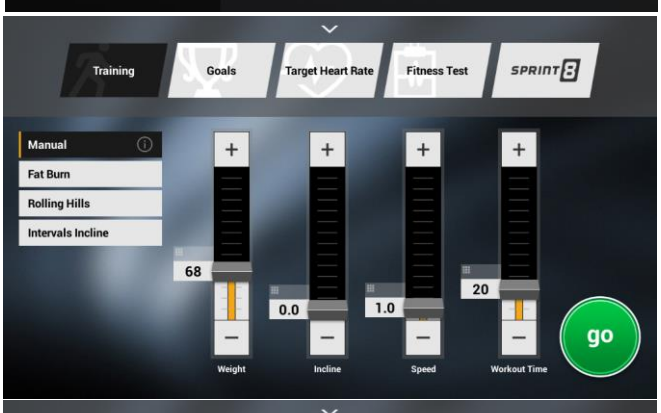


Virtual Active Setup screen

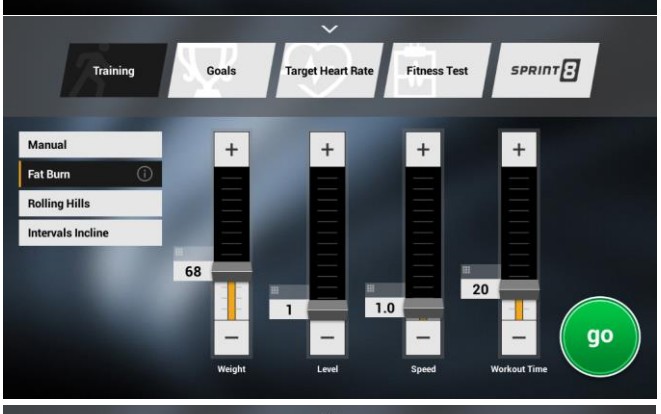
Program Main Screen

Select Profile Screen

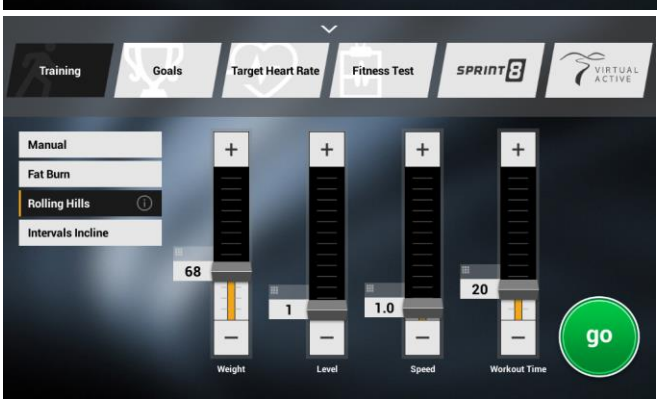
Manual Setup Screen



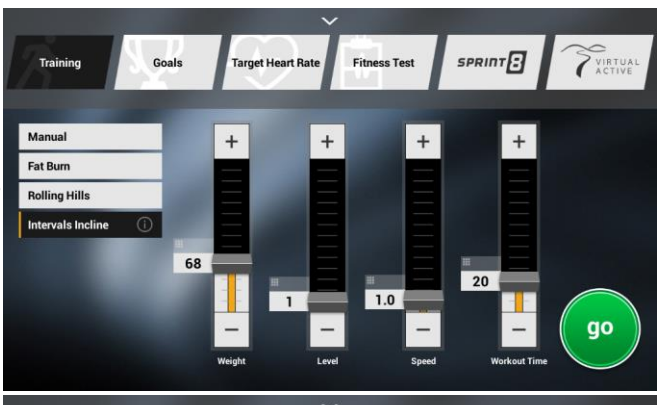
Fat Burn Setup Screen



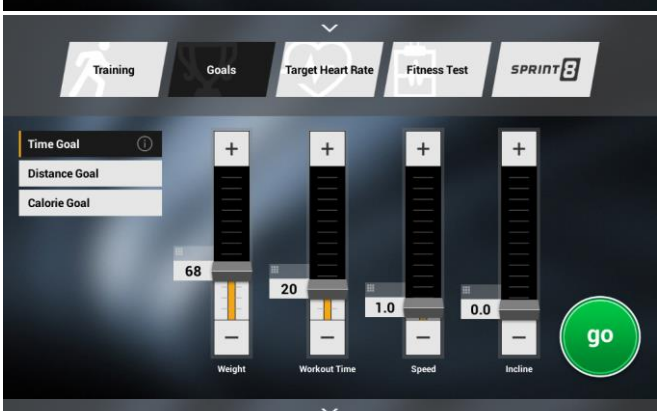
Rolling Hills Setup Screen



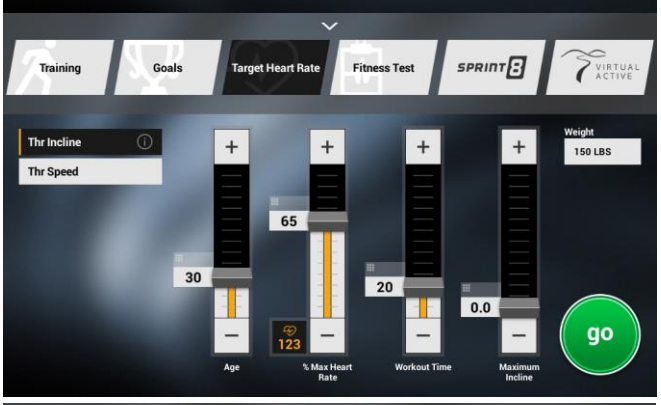
Intervals Incline Setup Screen



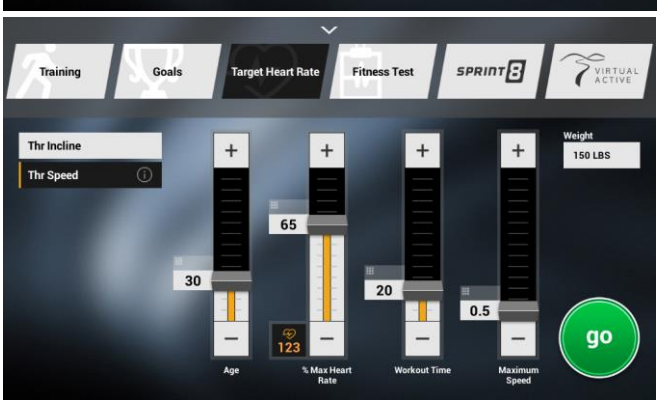
Goal Based Setup Screen



Thr Incline Setup Screen



Thr Speed Setup Screen



Program Main Screen (UR) – 30-Series

Values are displayed as MIN - MAX, DEFAULT
Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

	Frame	Bike (UR) 30-Series Inputs									
Workout	**Bike (UR) 30-Series**	**Age**	**% Max HR**	**Workout Time (minutes)**	**Max Resistance (machine level)**	**Weight (lbs)**	**Resistance (machine level)**	**Level (workout level)**	**Distance (miles)**	**Calories**	**Media Type**
THR(%) Incline	-	-	-	-	-	-	-	-	-	-	-
THR(%) Speed	-	-	-	-	-	-	-	-	-	-	-
THR(%) Resistance (Level)	X	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	1 - 20, 1 (Settings Default)	50 - 350, 150 (Settings Default)	-	-	-	-	-
Training - Manual	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	-	-
Training - Fat Burn	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Rolling Hills	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Intervals (Incline)	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Resistance (Level))	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Constant Watts	-	-	-	-	-	-	-	-	-	-	-
Training - Glutes	-	-	-	-	-	-	-	-	-	-	-
Goal - Time	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	-	-
Goal - Distance	X	-	-	-	-	50 - 350, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	X	-	-	-	-	50 - 350, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	X	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	1 - 20, 1 (Settings Default) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

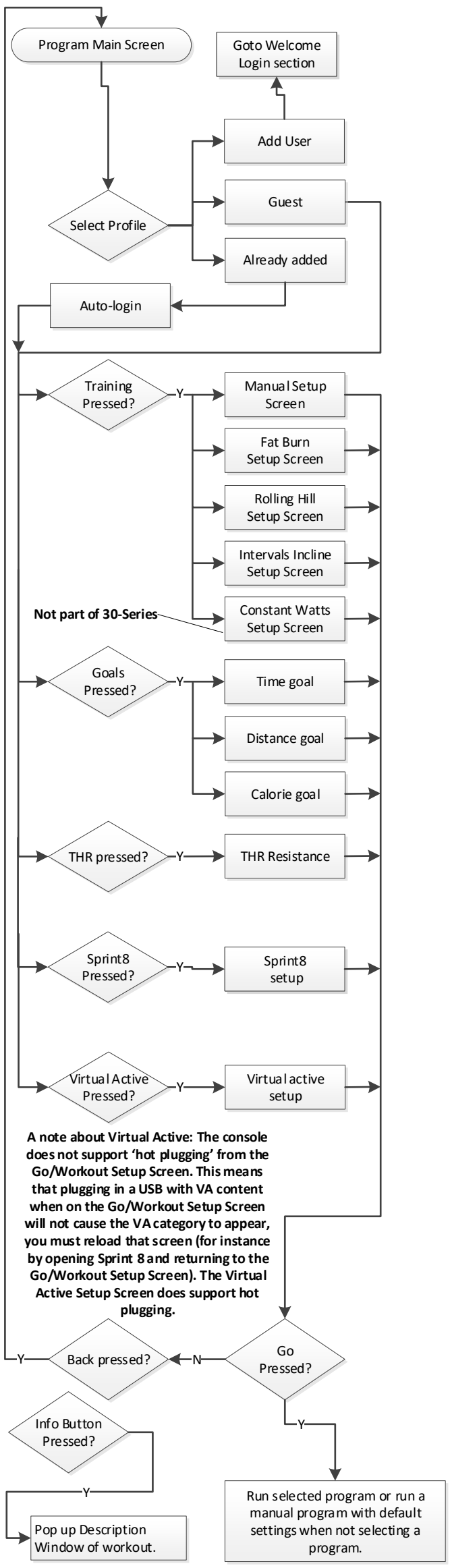
Program Main Screen (UR) – 50-Series

Values are displayed as MIN - MAX, DEFAULT
Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

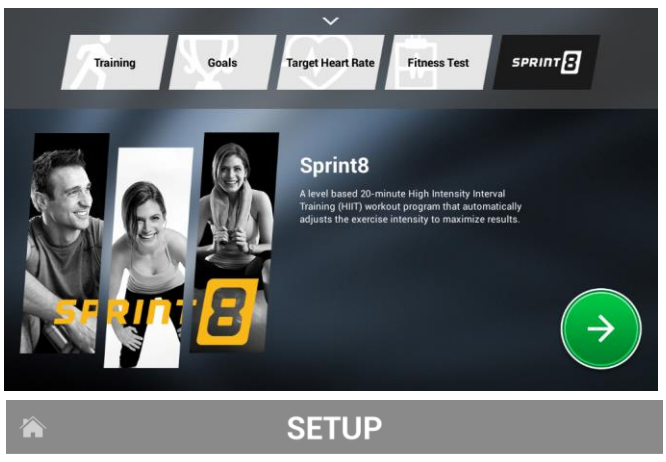
Note: Up/Down arrows +/- 1 Watt.

	Frame	Bike (UR) 50-Series Inputs										
Workout	Bike (UR) 50-Series	Age	% Max HR	Workout Time (minutes)	Max Resistance (machine level)	Weight (lbs)	Watts	Resistance (machine level)	Level (workout level)	Distance (miles)	Calories	Media Type
THR(%) Incline	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Speed	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Resistance (Level)	X	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	1 - 30, 1 (Settings Default)	50 - 350, 150 (Settings Default)	-	-	-	-	-	-
Training - Manual	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	-	-
Training - Fat Burn	-	-	-	-	-	-	-	-	-	-	-	-
Training - Rolling Hills	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Intervals (Incline)	-	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Resistance (Level))	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Constant Watts	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	15 - 525, 15	-	-	-	-	-
Training - Glutes	-	-	-	-	-	-	-	-	-	-	-	-
Goal - Time	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	-	-
Goal - Distance	X	-	-	-	-	50 - 350, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	X	-	-	-	-	50 - 350, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 350, 150 (Settings Default)	-	-	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	X	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	-	1 - 30, 1 (Settings Default) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

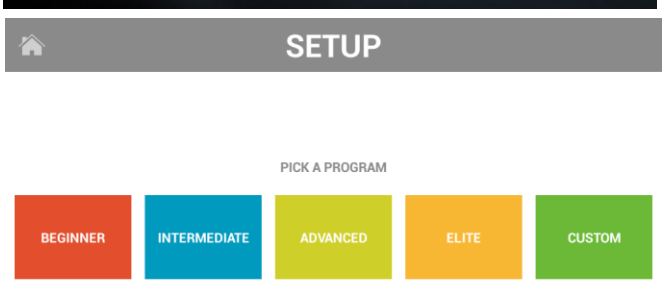
Program Main Screen (U)



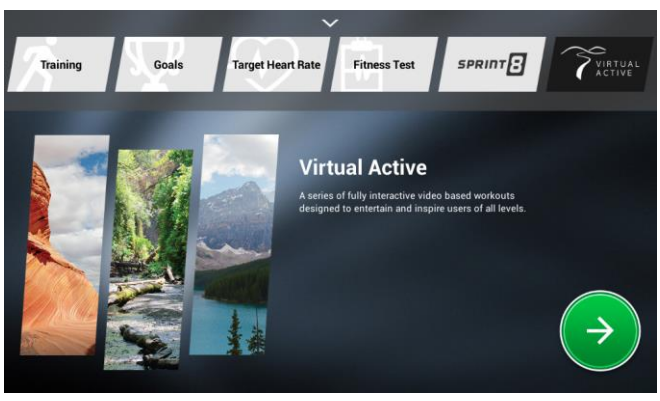
Sprint8 Start Screen



Sprint8 Setup Screen



Virtual Active Start screen

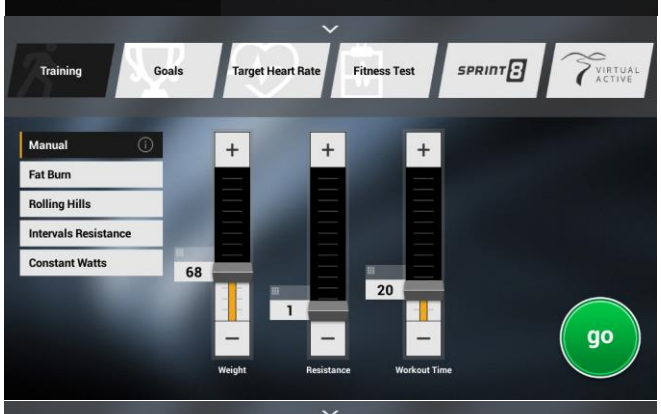


Virtual Active Setup screen

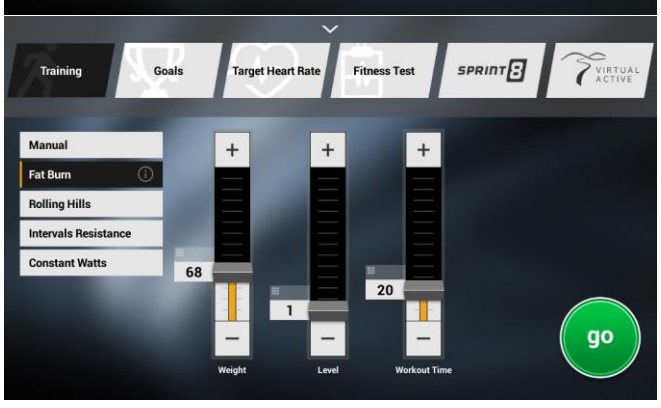
Program Main Screen

Select Profile Screen

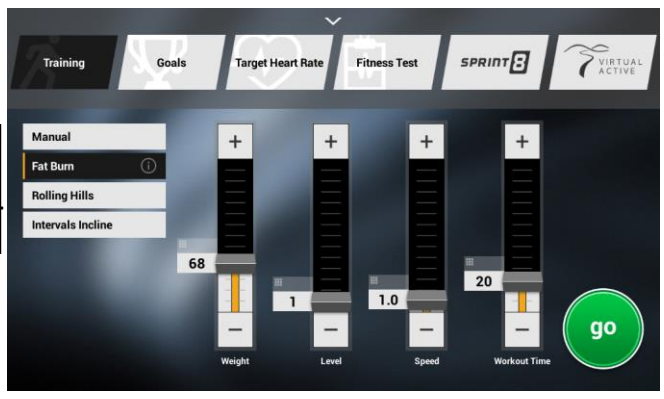
Manual Setup Screen



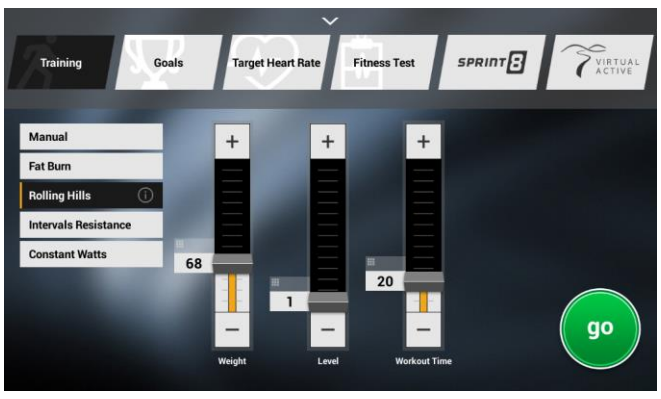
Fat Burn Setup Screen



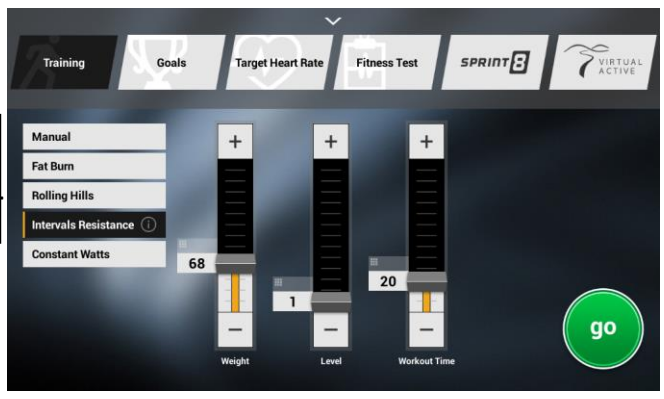
Fat Burn Setup Screen



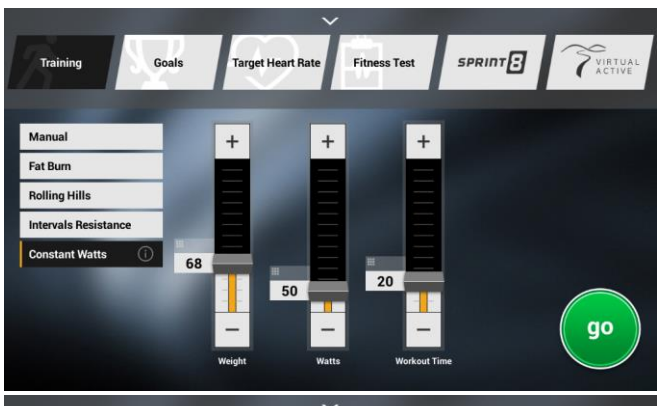
Rolling Hills Setup Screen



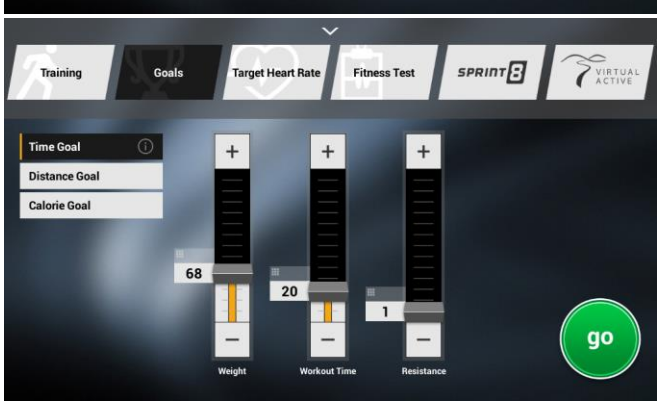
Intervals Incline Setup Screen



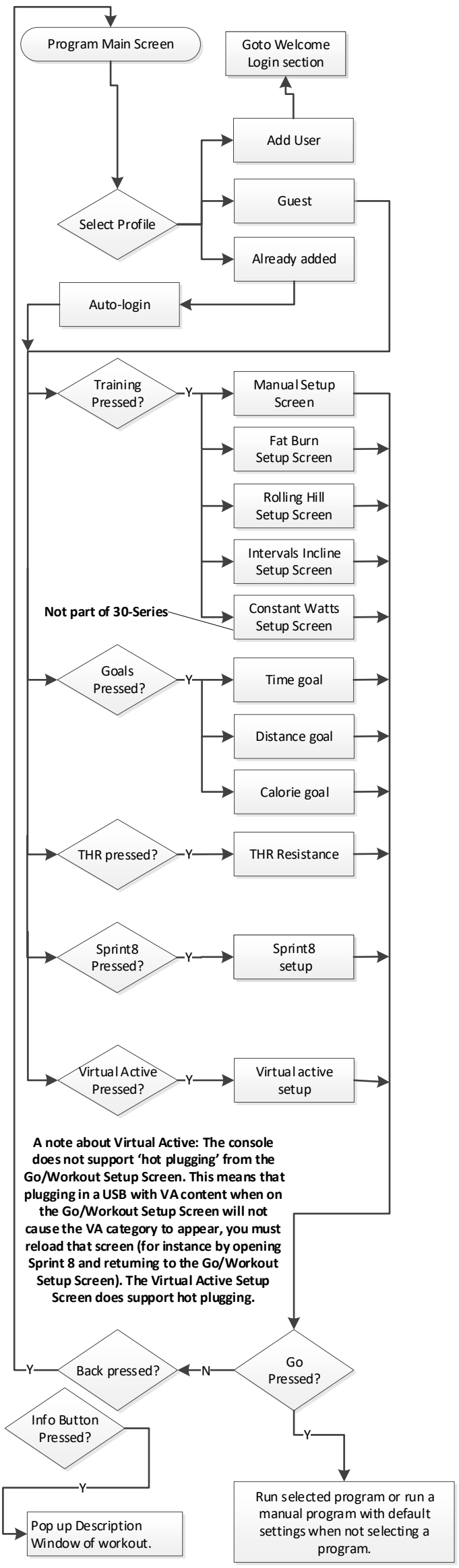
Constant Watts Setup Screen



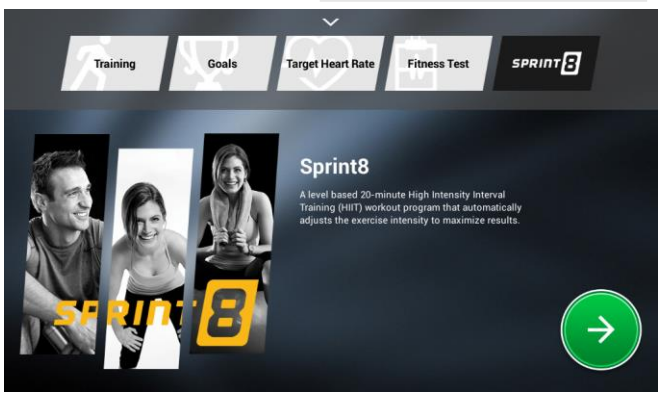
Goal Based Setup Screen



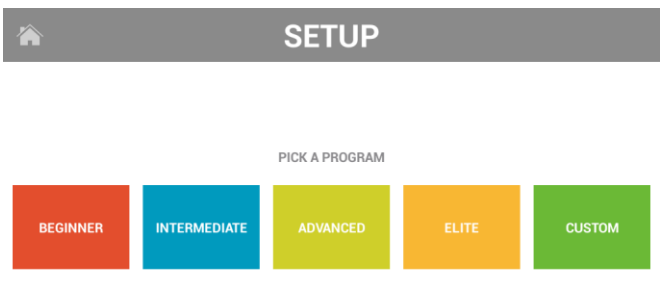
Program Main Screen (R)



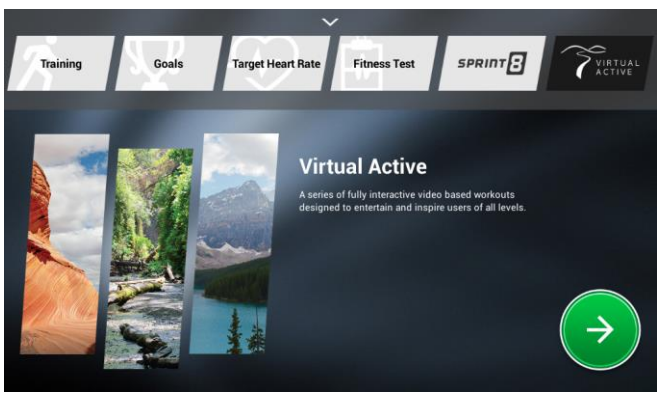
Sprint8 Start Screen



Sprint8 Setup Screen



Virtual Active Start screen

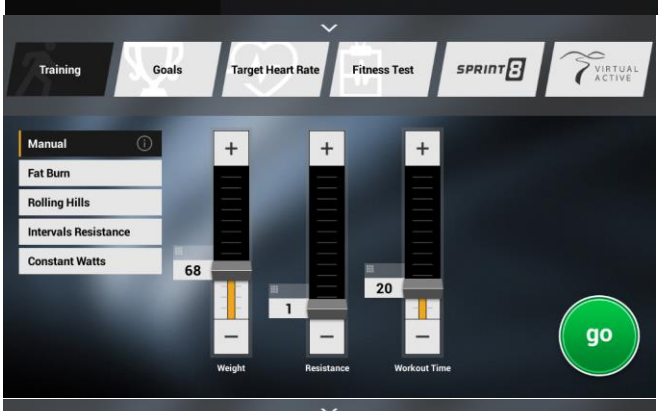


Virtual Active Setup screen

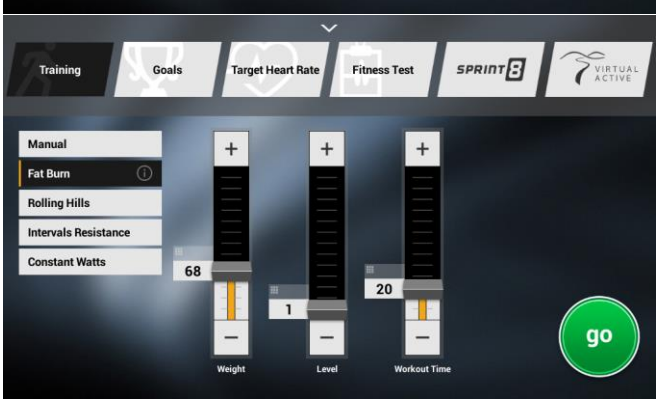
Program Main Screen

Select Profile Screen

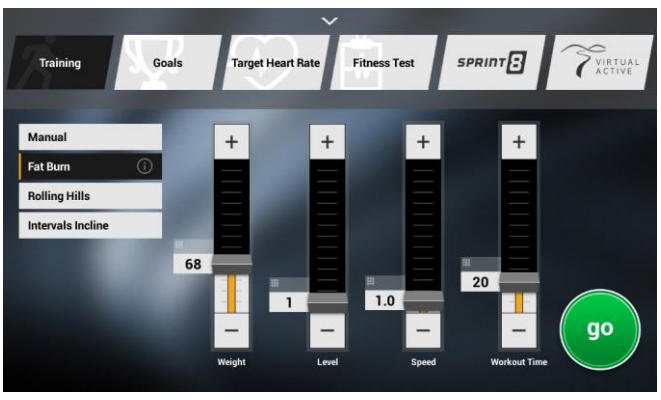
Manual Setup Screen



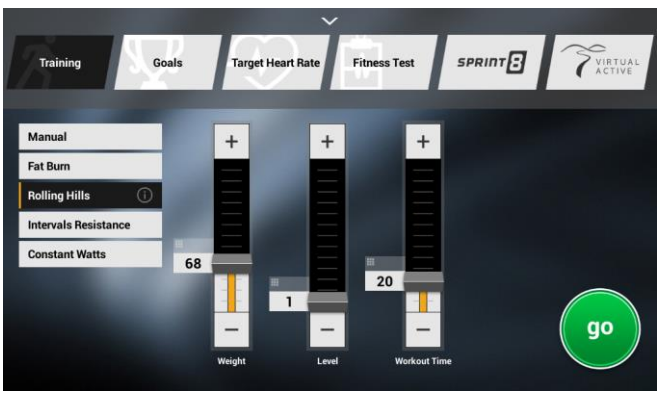
Fat Burn Setup Screen



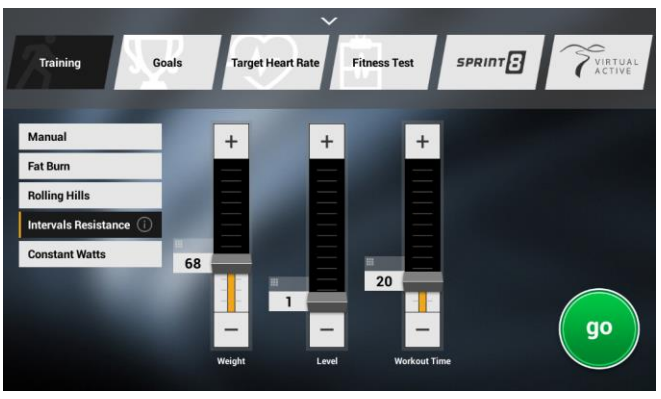
Fat Burn Setup Screen



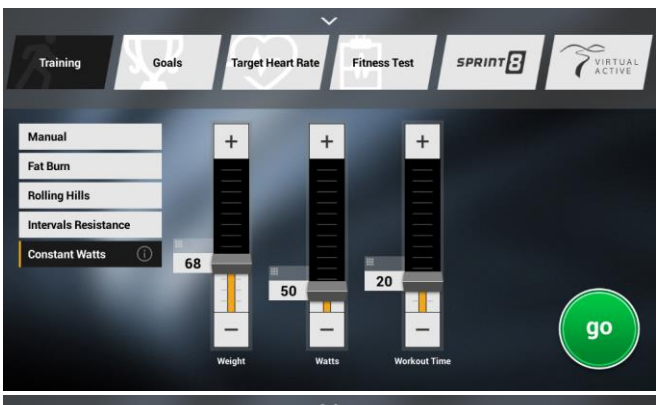
Rolling Hills Setup Screen



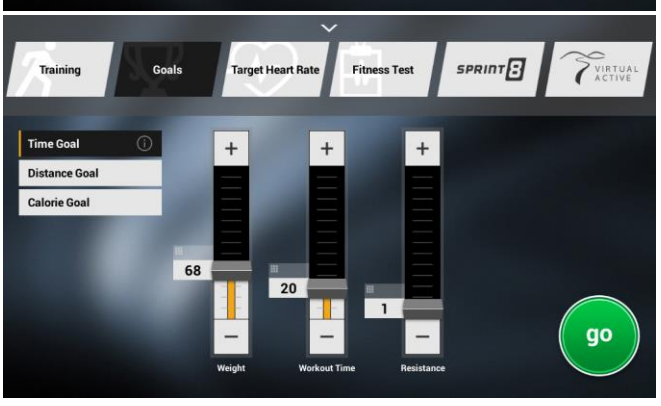
Intervals Incline Setup Screen



Constant Watts Setup Screen



Goal Based Setup Screen



Values are displayed as MIN - MAX, DEFAULT
Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

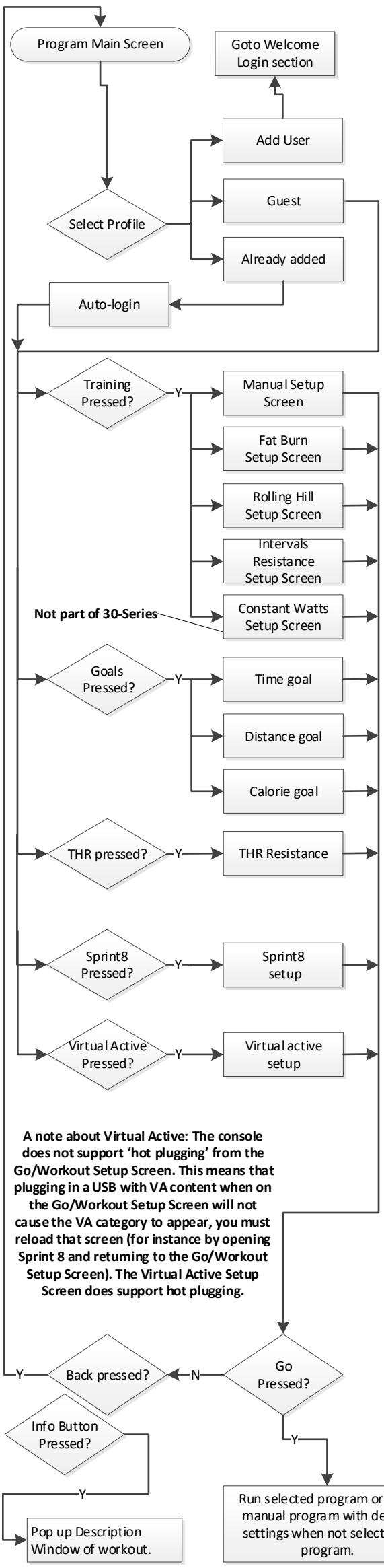
	Frame	Elliptical (E) 30-Series Inputs									
Workout	Elliptical (E) 30-Series	Age	% Max HR	Workout Time (minutes)	Max Resistance (machine level)	Weight (lbs)	Resistance (machine level)	Level (workout level)	Distance (miles)	Calories	Media Type
THR(%) Incline	-	-	-	-	-	-	-	-	-	-	-
THR(%) Speed	-	-	-	-	-	-	-	-	-	-	-
THR(%) Resistance (Level)	X	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	1 - 20, 1 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	-	-	-
Training - Manual	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	-	-
Training - Fat Burn	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Rolling Hills	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Intervals (Incline)	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Resistance (Level))	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Constant Watts	-	-	-	-	-	-	-	-	-	-	-
Training - Glutes	-	-	-	-	-	-	-	-	-	-	-
Goal - Time	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	-	-
Goal - Distance	X	-	-	-	-	50 - 325, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	X	-	-	-	-	50 - 325, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	X	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	1 - 20, 1 (Settings Default) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

Values are displayed as MIN - MAX, DEFAULT
Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

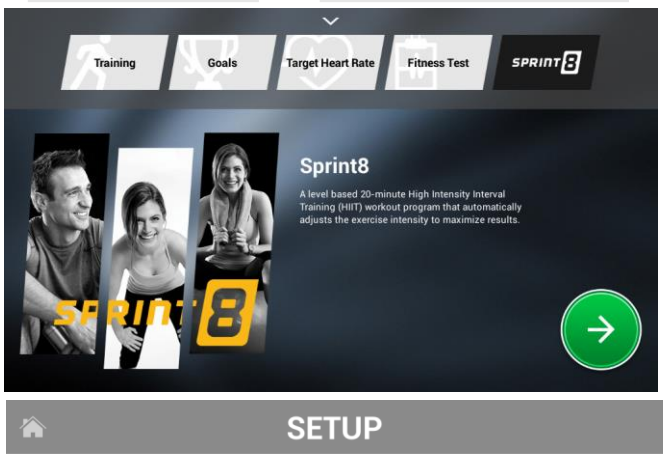
Note: Up/Down arrows +/- 1 Watt.

	Frame	Elliptical (E) 50-Series Inputs										
Workout	Elliptical (E) 50-Series	Age	% Max HR	Workout Time (minutes)	Max Resistance (machine level)	Weight (lbs)	Watts	Resistance (machine level)	Level (workout level)	Distance (miles)	Calories	Media Type
THR(%) Incline	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Speed	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Resistance (Level)	X	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	1 - 30, 1 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	-	-	-	-
Training - Manual	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	-	-
Training - Fat Burn	-	-	-	-	-	-	-	-	-	-	-	-
Training - Rolling Hills	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Intervals (Incline)	-	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Resistance (Level))	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Constant Watts	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	15 - 525, 15	-	-	-	-	-
Training - Glutes	-	-	-	-	-	-	-	-	-	-	-	-
Goal - Time	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	-	-
Goal - Distance	X	-	-	-	-	50 - 325, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	X	-	-	-	-	50 - 325, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	-	50 - 325, 150 (Settings Default)	-	-	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	X	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	-	1 - 30, 1 (Settings Default) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

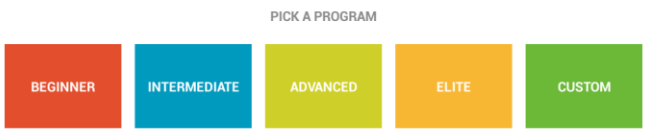
Program Main Screen (E)



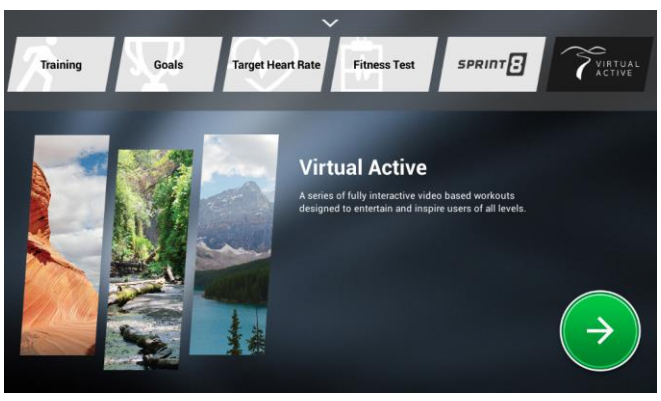
Sprint8 Start Screen



Sprint8 Setup Screen



Virtual Active Start screen

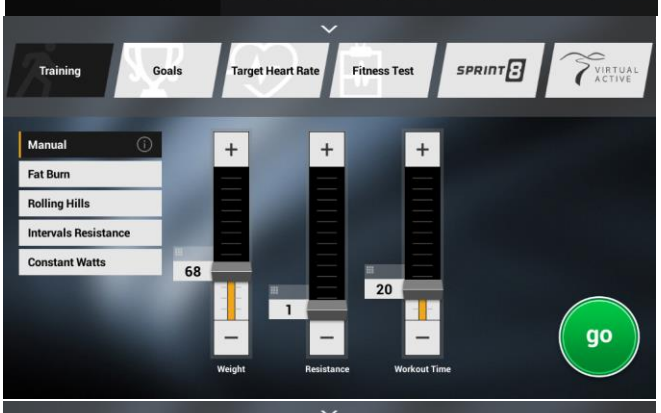


Virtual Active Setup screen

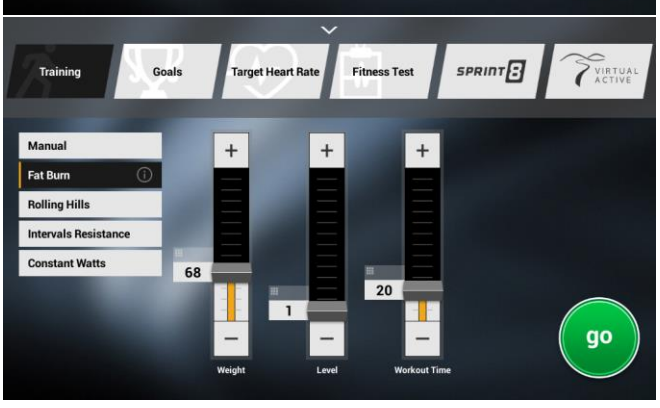
Program Main Screen

Select Profile Screen

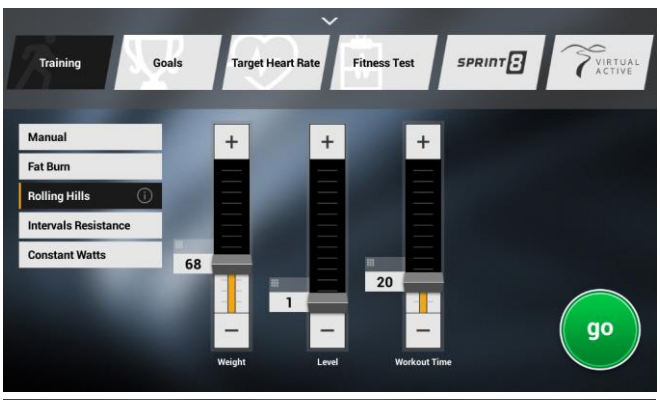
Manual Setup Screen



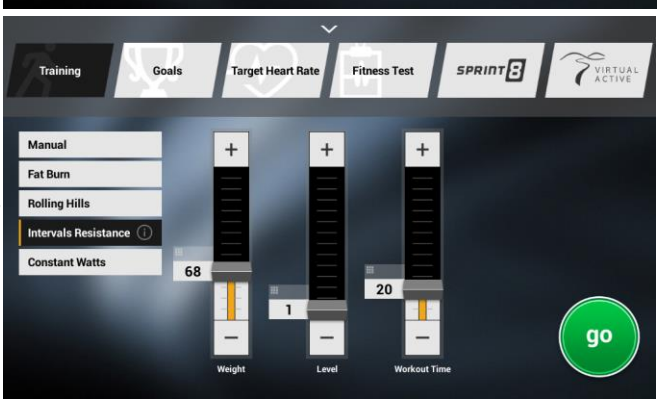
Fat Burn Setup Screen



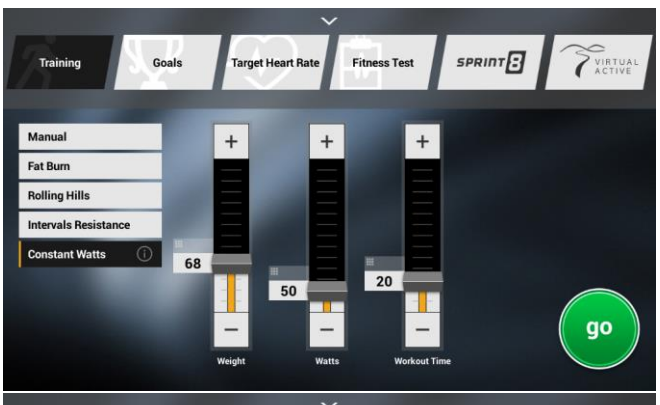
Rolling Hills Setup Screen



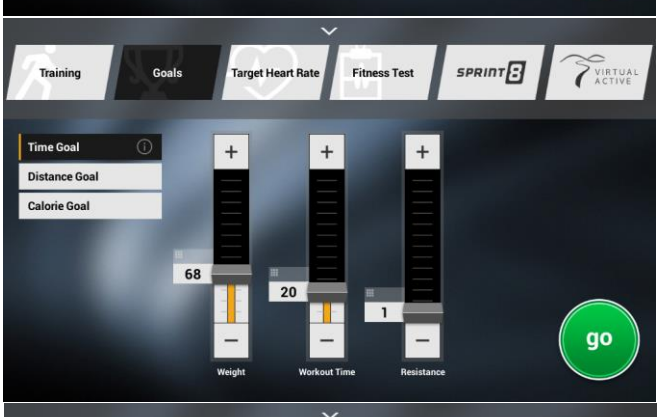
Intervals Incline Setup Screen



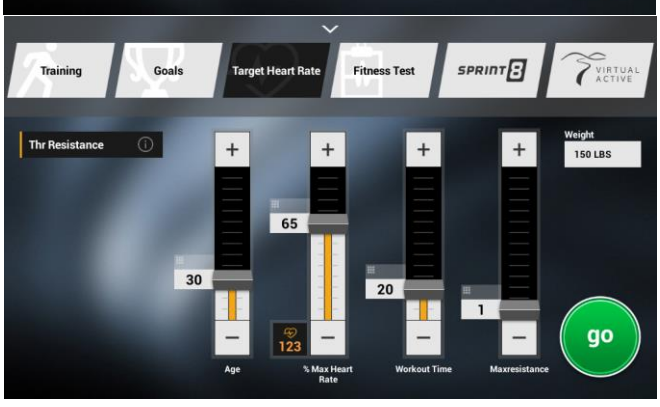
Constant Watts Setup Screen



Goal Based Setup Screen



Target Heart Rate Setup Screen



Program Main Screen (A) – 30-Series

Values are displayed as MIN - MAX, DEFAULT

Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

	Frame	Ascent (A/LBA) 30-Series Inputs											
Workout	**Ascent (A/LBA) 30-Series**	**Age**	**% Max HR**	**Workout Time (minutes)**	**Weight (lbs)**	**Max Resistance (machine level)**	**Min Resistance (machine level)**	**Incline (%)**	**Resistance (machine level)**	**Level (workout level)**	**Distance (miles)**	**Calories**	**Media Type**
THR(%) Incline	-	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Speed	-	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Resistance (Level)	X	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	1 - 20, 1 (Settings Default)	-	-	-	-	-	-	-
Training - Manual	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	0 - 100 (Settings Max), 0	1 - 20, 1 (Settings Default)	-	-	-	-
Training - Fat Burn	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Rolling Hills	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Incline)	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Resistance (Level))	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Constant Watts	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Glutes	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	2 - 20, 2 (Min Resistance + 1)	1 - 19, 1 (Settings Default or Max Resistance - 1)	-	-	-	-	-	-
Goal - Time	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	0 - 100 (Settings Max), 0	1 - 20, 1 (Settings Default)	-	-	-	-
Goal - Distance	X	-	-	-	50 - 325, 150 (Settings Default)	-	-	0 - 100 (Settings Max), 0	1 - 20, 1 (Settings Default)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	X	-	-	-	50 - 325, 150 (Settings Default)	-	-	0 - 100 (Settings Max), 0	1 - 20, 1 (Settings Default)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 325, 150 (Settings Default)	-	-	-	-	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	X	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	-	0 - 100 (Settings Max), 0 Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1 (Settings Default) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

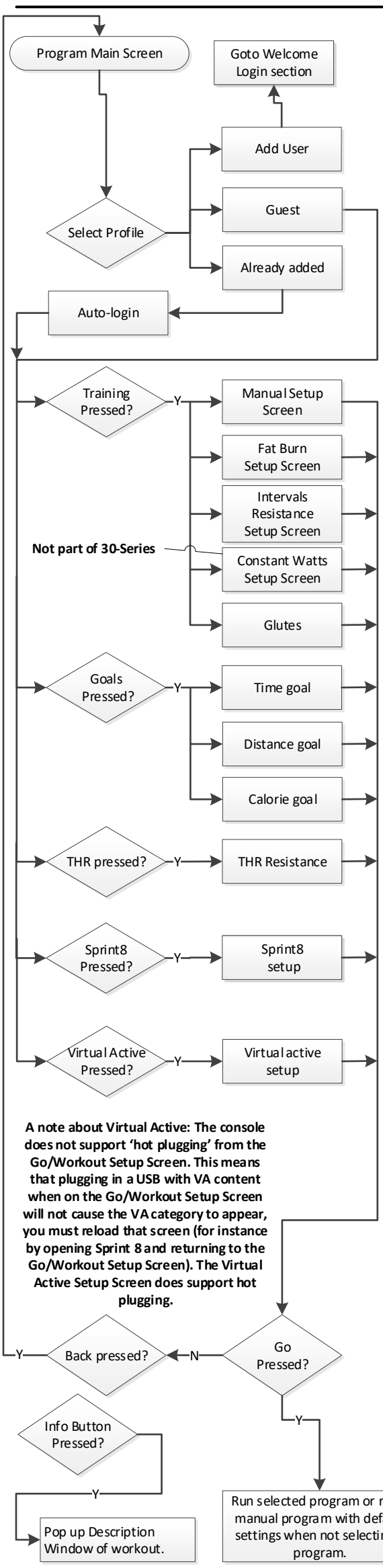
Values are displayed as MIN - MAX, DEFAULT

Important Note: Input value ranges and defaults are based on factory defaults. The machine's range may be larger and the default value different depending on settings.
Please query the machine for the appropriate limits and defaults for workout inputs.

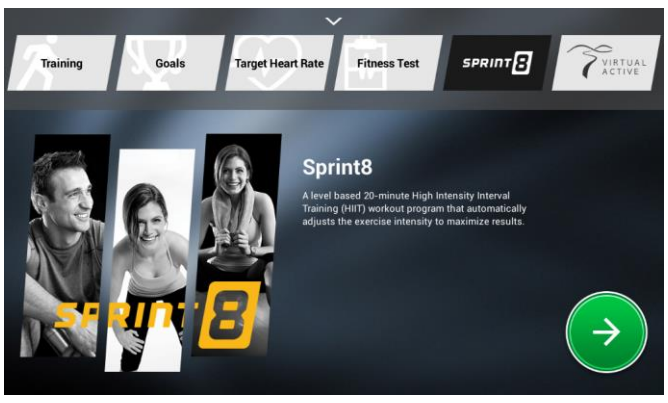
Note: Up/Down arrows +/- 1 Watt.

	Frame	Ascent (A/LBA) 50-Series Inputs												
Workout	Ascent (A/LBA) 50-Series	Age	% Max HR	Workout Time (minutes)	Weight (lbs)	Watts	Max Resistance (machine level)	Min Resistance (machine level)	Incline (%)	Resistance (machine level)	Level (workout level)	Distance (miles)	Calories	Media Type
THR(%) Incline	-	-	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Speed	-	-	-	-	-	-	-	-	-	-	-	-	-	-
THR(%) Resistance (Level)	X	14 - 99, 30 (Settings Default)	50 - 90%, 65%	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	-	1 - 30, 1 (Settings Default)	-	-	-	-	-	-	-
Training - Manual	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	-	-	-	0 - 100 (Settings Max), 0	1 - 30, 1 (Settings Default)	-	-	-	-
Training - Fat Burn	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Rolling Hills	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Incline)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training - Intervals (Resistance (Level))	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	-	-	-	-	-	1 - 20, 1 (Settings Default)	-	-	-
Training - Constant Watts	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	15 - 525, 15	-	-	-	-	-	-	-	-
Training - Glutes	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	-	2 - 30, 2 (Min Resistance + 1)	1 - 29, 1 (Settings Default or Max Resistance - 1)	-	-	-	-	-	-
Goal - Time	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	-	-	-	0 - 100 (Settings Max), 0	1 - 30, 1 (Settings Default)	-	-	-	-
Goal - Distance	X	-	-	-	50 - 350, 150 (Settings Default)	-	-	-	0 - 100 (Settings Max), 0	1 - 30, 1 (Settings Default)	-	0.1 - 31.0 (Settings Max), 3.0 (Settings Default)	-	-
Goal - Calorie	X	-	-	-	50 - 350, 150 (Settings Default)	-	-	-	0 - 100 (Settings Max), 0	1 - 30, 1 (Settings Default)	-	-	50 - 1000 (Settings Max), 300 (Settings Default)	-
Virtual Active	X	-	-	2 - 120 (Settings Max), 30 (Settings Default)	50 - 350, 150 (Settings Default)	-	-	-	-	-	1 - 20, 1 (Settings Default)	-	-	-
Sprint 8	X	-	-	1 - 8, 8 (segments) 2.5 - 16.5, 16.5 (minutes) Time does not include Warm Up (Warm Up is required and 3 minutes long). Last Segment always contains Cool Down which is 2 minutes long. Only in Custom.	-	-	-	-	0 - 100 (Settings Max), 0 Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 30, 1 (Settings Default) Per Segment (Sprint + Recovery adjustable). Only in Custom.	1 - 20, 1/6/11/16 (depends on difficulty category) Not Custom	-	-	None/Audio/Video, None

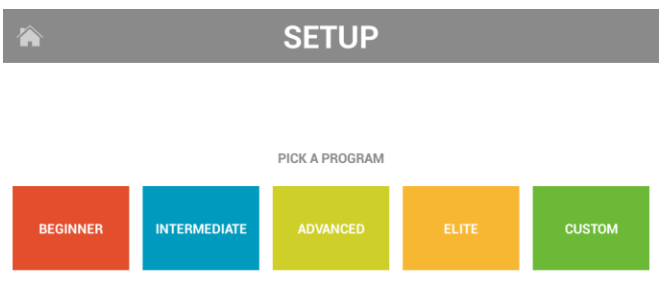
Program Main Screen (A)



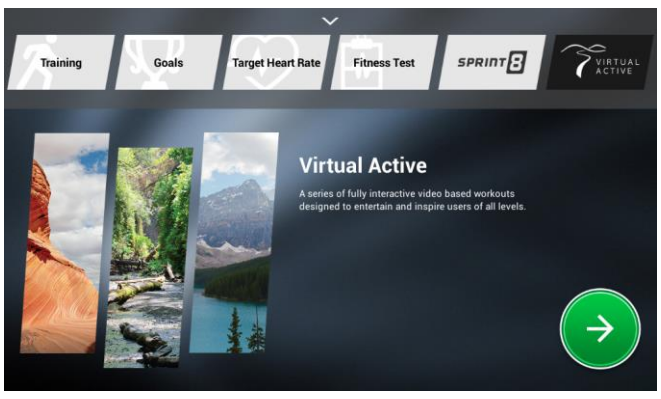
Sprint8 Start Screen



Sprint8 Setup Screen



Virtual Active Start screen

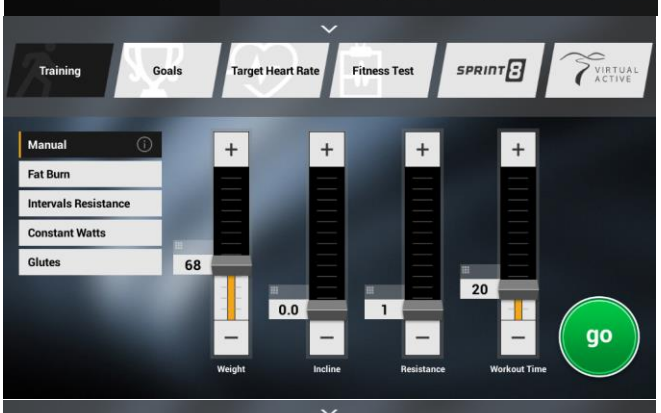


Virtual Active Setup screen

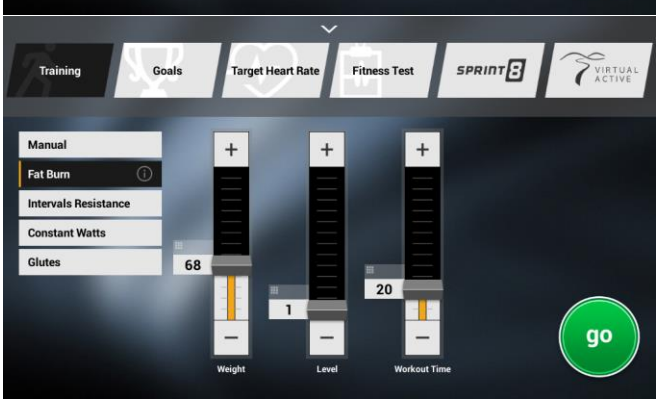
Program Main Screen

Select Profile Screen

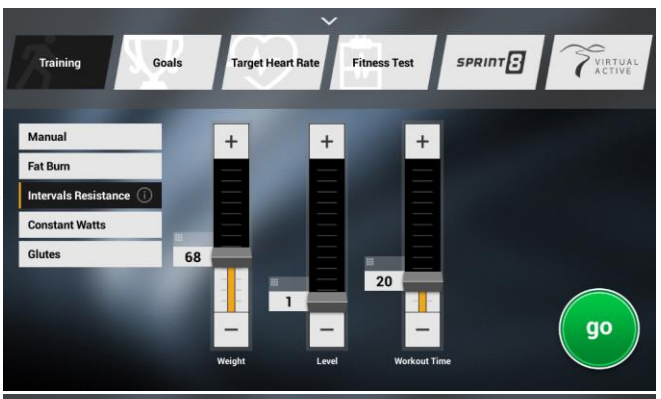
Manual Setup Screen



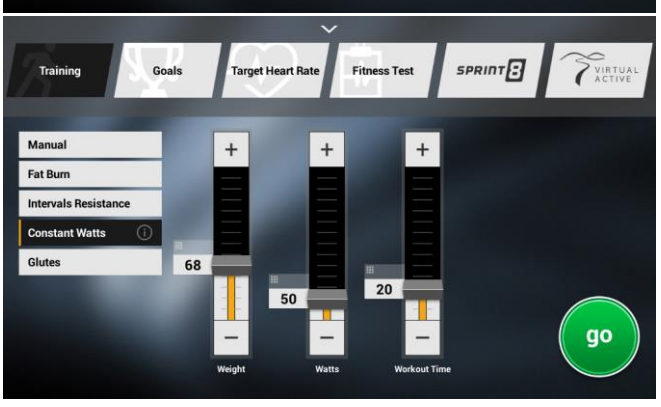
Fat Burn Setup Screen



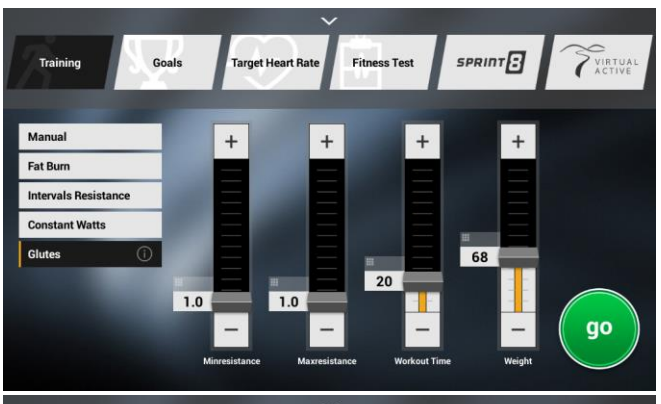
Intervals Incline Setup Screen



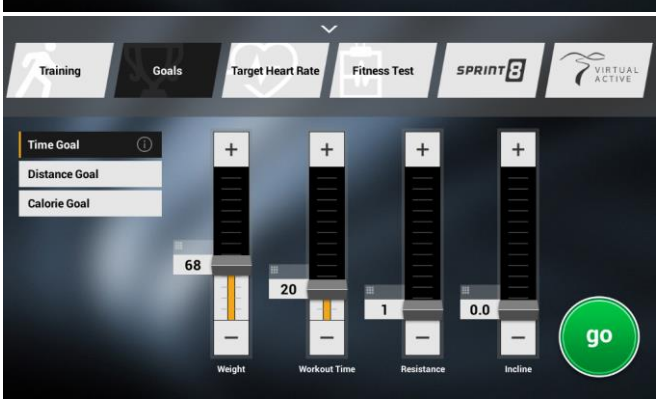
Constant Watts Setup Screen



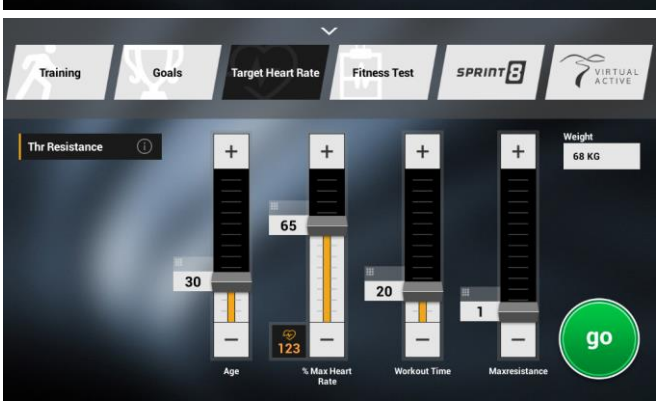
Glutes Setup Screen



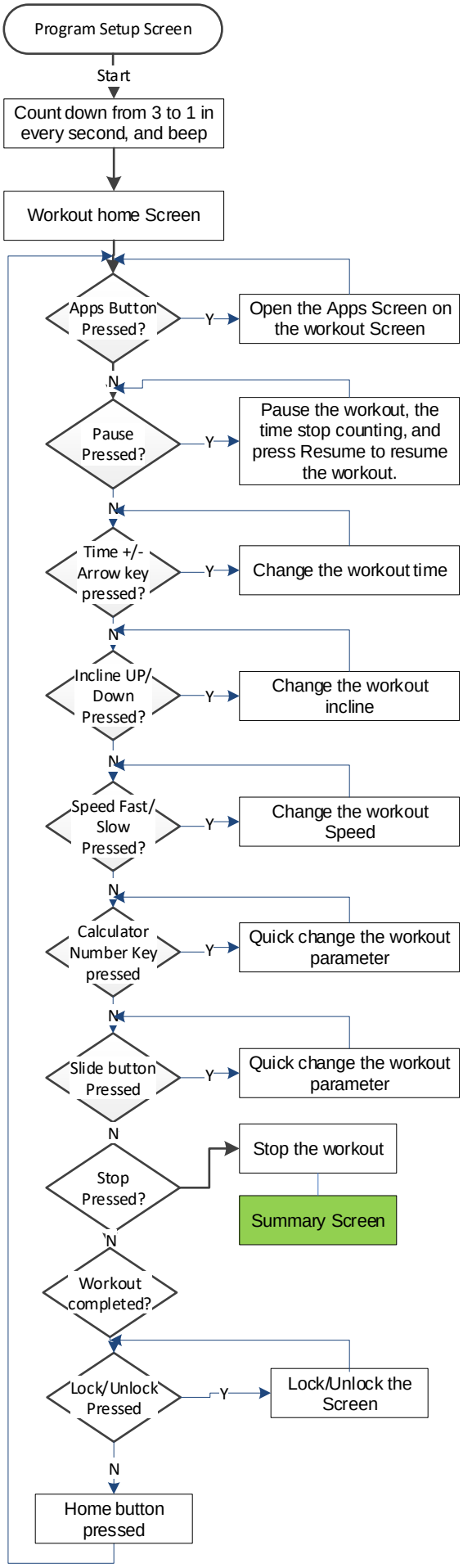
Goal Based Setup Screen



Target Heart Rate Setup Screen



Workout Screen (TM XIR)



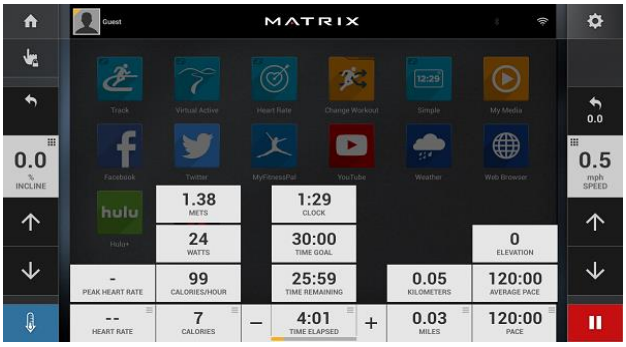
Workout Home Screen

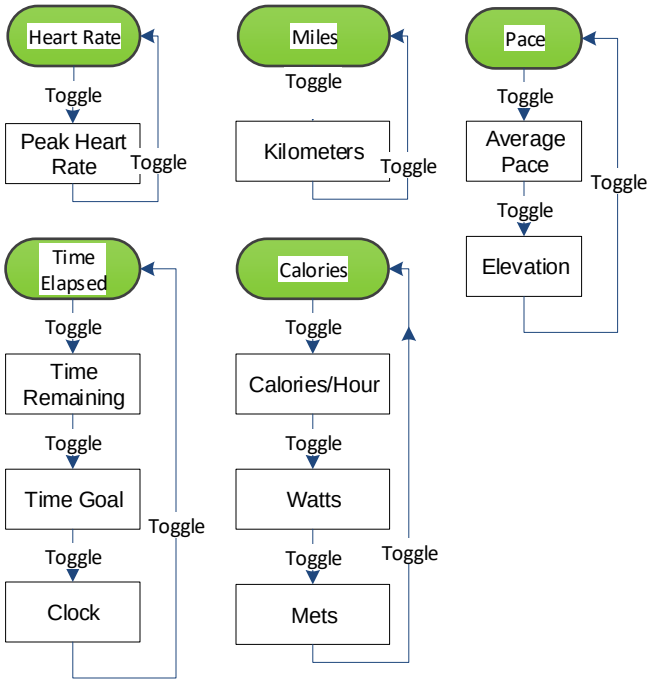
NOTE

1. If the screen is locked all <u>onscreen</u> buttons except the lock/unlock button will stop responding/ working until the screen is unlocked.
2. All physical buttons (Stop, E-Stop, Speed/Resistance/Incline Up, etc.) will work the same when the screen is locked as when it is unlocked.

Unlocked

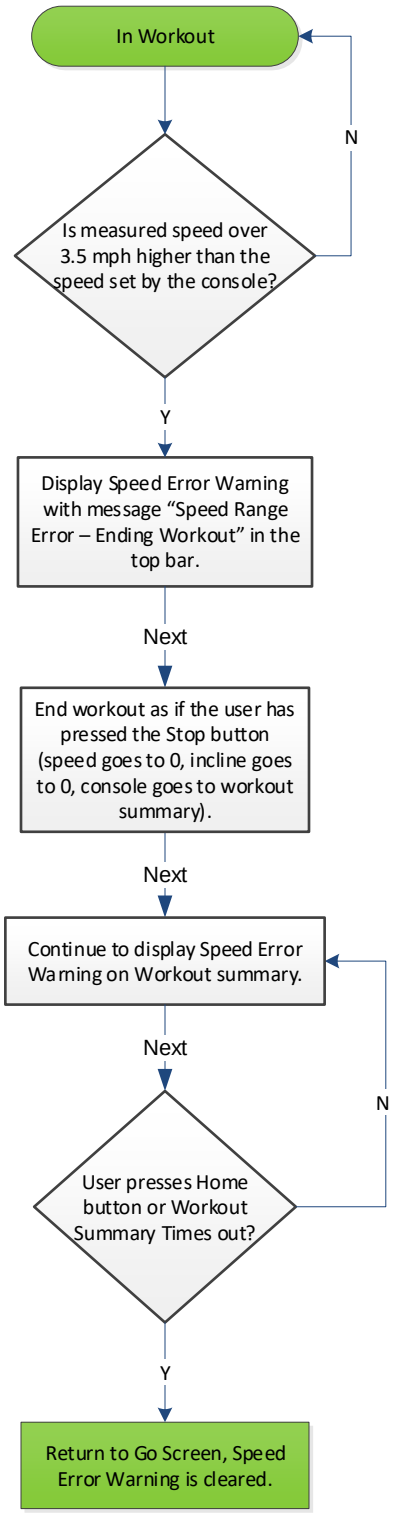
Locked





TM Speed Range Error (Overspeed Detection)

For all Matrix Retail Treadmills



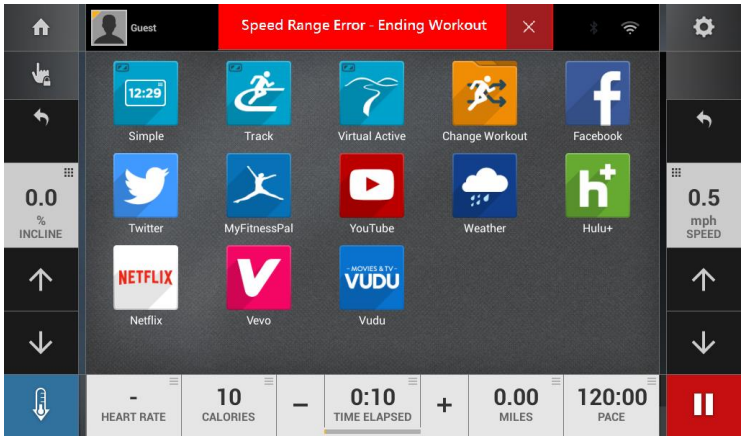
The IO will check the speed from the MCB every 100ms and compare it to the current speed set by the console. If the measured speed from the MCB is over 3.5 mph higher than the speed set by the console for over 500ms that is when the Speed Error Warning should trigger.

The Speed Error Warning should remain displayed in the Top Bar, even in Workout Summary, until the console returns to the Go Screen. Then it should be removed.

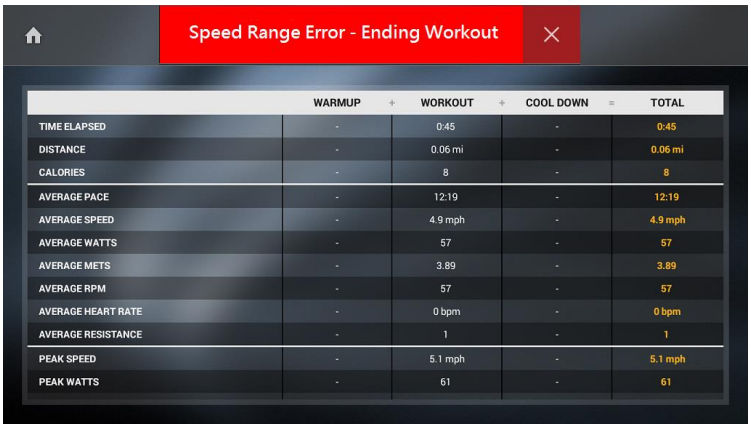
When the Speed Range Error occurs the IO will automatically have the MCB go to 0 RPM and lower the incline back to 0. The console can query the IO at any time to determine if the error has occurred and the IO is doing this with the command 0x0094. If the IO responds with 1 then the Speed Range Error occurred, if the IO responds with 0 then it has not. When the IO returns 1 the console should end the workout.

Currently the console polls the IO every second.

Speed Error Warning during Workout



Speed Error Warning during Summary

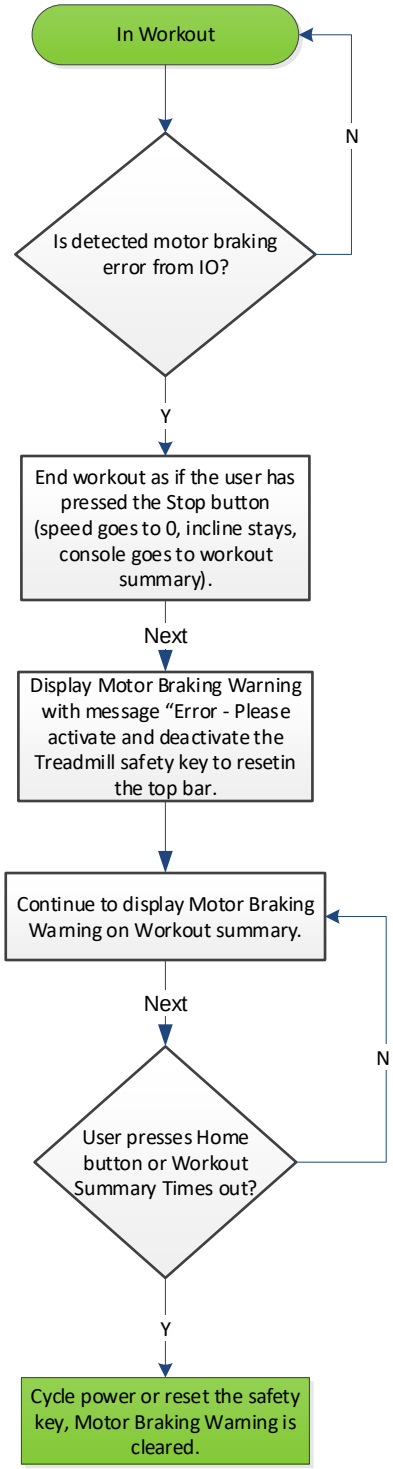


	WARMUP +	WORKOUT +	COOL DOWN =	TOTAL
TIME ELAPSED	-	0:45	-	0:45
DISTANCE	-	0.06 mi	-	0.06 mi
CALORIES	-	8	-	8
AVERAGE PACE	-	12:19	-	12:19
AVERAGE SPEED	-	4.9 mph	-	4.9 mph
AVERAGE WATTS	-	57	-	57
AVERAGE METS	-	3.89	-	3.89
AVERAGE RPM	-	57	-	57
AVERAGE HEART RATE	-	0 bpm	-	0 bpm
AVERAGE RESISTANCE	-	1	-	1
PEAK SPEED	-	5.1 mph	-	5.1 mph
PEAK WATTS	-	61	-	61

Go Screen

TM Motor Braking Error (Overweight Detection)

Only for T70 and T75



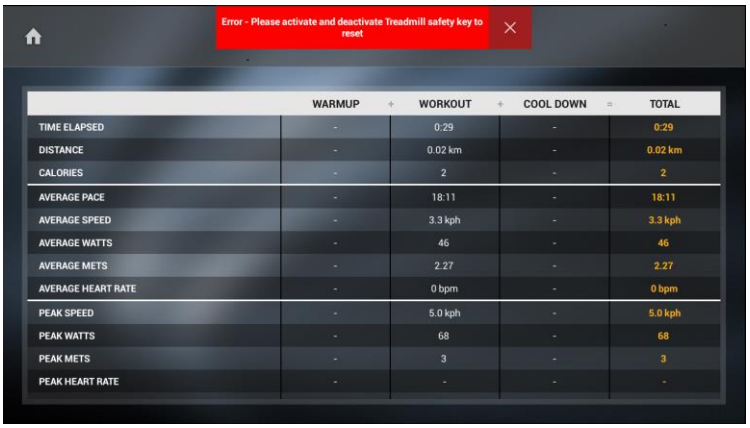
In this case the console needs to detect that the motor shut off, end the workout and notify the user that an error occurred and they must cycle the power or reset the safety key (pull out and put back)

- The Motor Braking Warning should remain displayed in the Top Bar, even in Workout Summary and Go Screen until the power cycle or reset the Safety key.
- Go Button should be disabled during Motor Braking warning

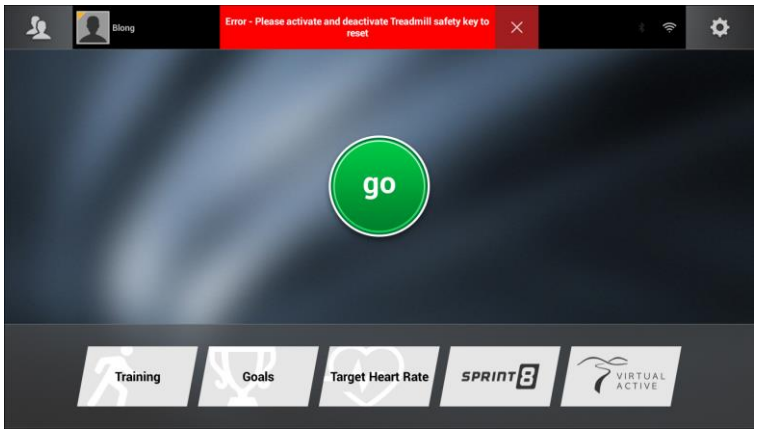
When the Motor Braking Error occurs the IO will automatically have the MCB go to 0 RPM. The console can query the IO at any time to determine if the error has occurred and the IO is doing this with the command 0x02A1. If the IO responds with 1 then the Motor Braking Error occurred, if the IO responds with 0 then it has not. When the IO returns 1 the console should end the workout.

Currently the console polls the IO every second.

<u>Motor Braking Warning during Summary</u>

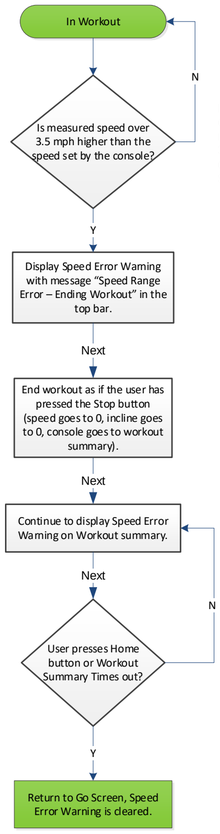


<u>Go Screen</u>



Lube Belt (TM), Lube Chain (CM)

For all Matrix Retail treadmills except T70



The IO will check the speed from the MCB every 100ms and compare it to the current speed set by the console. If the measured speed from the MCB is over 3.5 mph higher than the speed set by the console for over 500ms that is when the Speed Error Warning should trigger.

The Speed Error Warning should remain displayed in the Top Bar, even in Workout Summary, until the console returns to the Go Screen. Then it should be removed.

When the Speed Range Error occurs the IO will automatically have the MCB go to 0 RPM and lower the incline back to 0. The console can query the IO at any time to determine if the error has occurred and the IO is doing this with the command 0x0094. If the IO responds with 1 then the Speed Range Error occurred, if the IO responds with 0 then it has not. When the IO returns 1 the console should end the workout.

Currently the console polls the IO every second.

Speed Error Warning during Workout

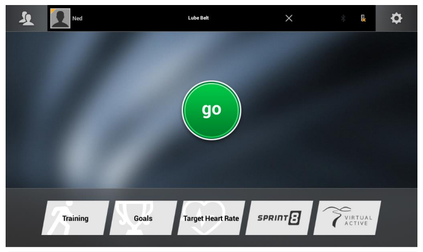
Speed Error Warning during Summary

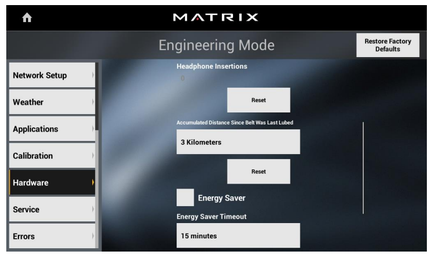
Go Screen

Refer to Lube Belt Reminder (page 50) for updated directions.

- The Lube Belt Notification is a reminder for users/owners of treadmills.
- The reminder comes up as a message in the Message Center (top bar).
- The message displayed is "Lube Belt".
- The message appears on the Go Screen and remains until the user closes the message by either tapping the 'X' on the message or simultaneously pressing and holding the physical Stop and Speed Up buttons for 5 seconds.
- Closing the message by tapping the 'X' will only remove the message until the console is either rebooted or a workout of at least 0.1 miles is completed.
- Tapping the 'X' removes the message. However, the message will reappear when
- A different user is selected from the drop down menu
- The Go Screen is re displayed, irrespective if a workout of at least 0.1 miles has been completed.
- The reminder triggers every 150 miles the treadmill accumulates and is not removed until the user resets this accumulated distance.
- A user can reset this accumulation to 0 at any time.
- The user can reset the accumulated distance by simultaneously pressing and holding the physical Stop and Speed Up buttons for 5 seconds.
- Note: This will require an OS update.
- Resetting the accumulated distance will also clear the reminder from the Message Center.
- There should be an option in the Hardware Tab of Machine, Service, and Engineering Mode.
- The option is called "Accumulated Distance Since Belt Was Last Lubed".
- The option displays the current distance accumulation since the last time it was reset.
- The distance displays in km or miles depending on the system/user configuration for units.
- The distance displayed is rounded to the nearest km/mile.
- The option includes a Reset button that can be tapped at any time to reset the accumulated distance to 0 (behaves the same as pressing and holding Stop and Speed Up).

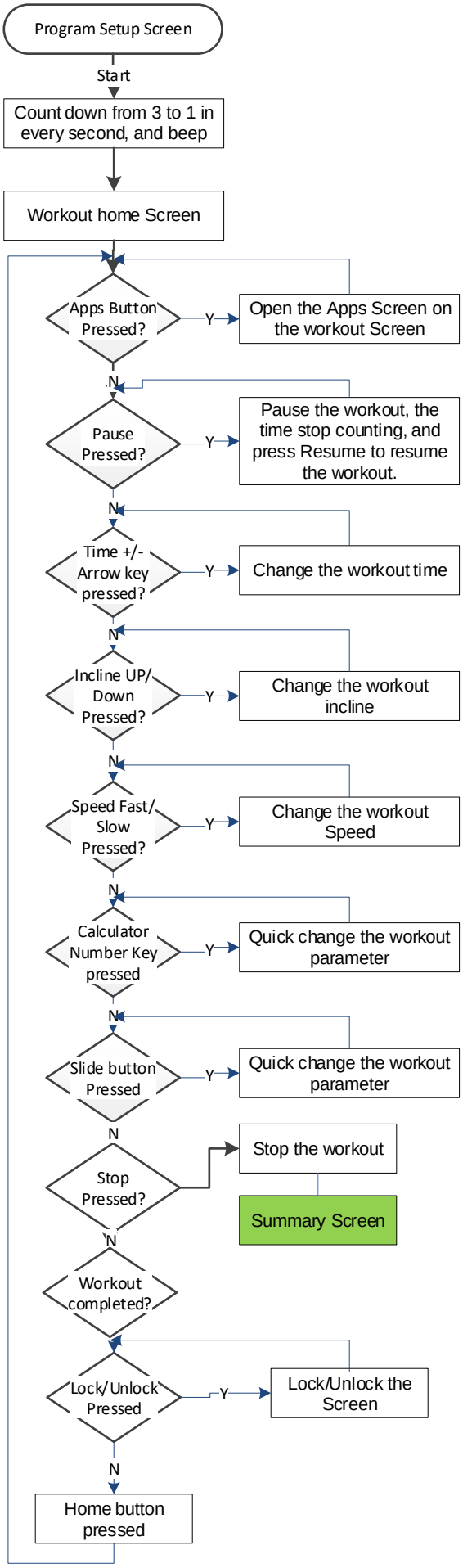
- Lube Chain Message
- The retail Climbmill chain will require cleaning and lubrication every 1,080 hours (about 7 years in a retail environment). I think it would be great if we could build in a message as we do for treadmill belt lubrication to "pop up" after 1,080 hours of use. In the Product Guide we would include the required maintenance and instruction but since this is such a long time after purchase I think it would be good to include this in the software like the treadmills.
- 3 hours per week * 52 weeks per year = 156 hours per year
- 1,080 hours / 156 hours per year = 6.92 years
- This is Accumulated Hours. Should replicate Lube Belt behavior, this covers Message Center, Engineering App and physical buttons to reset message (Resistance up + Stop)





https://jhtnaee.atlassian.net/secure/attachment/33883/Imperial%20Distance.png

Workout Screen (U|R|E|A XIR)



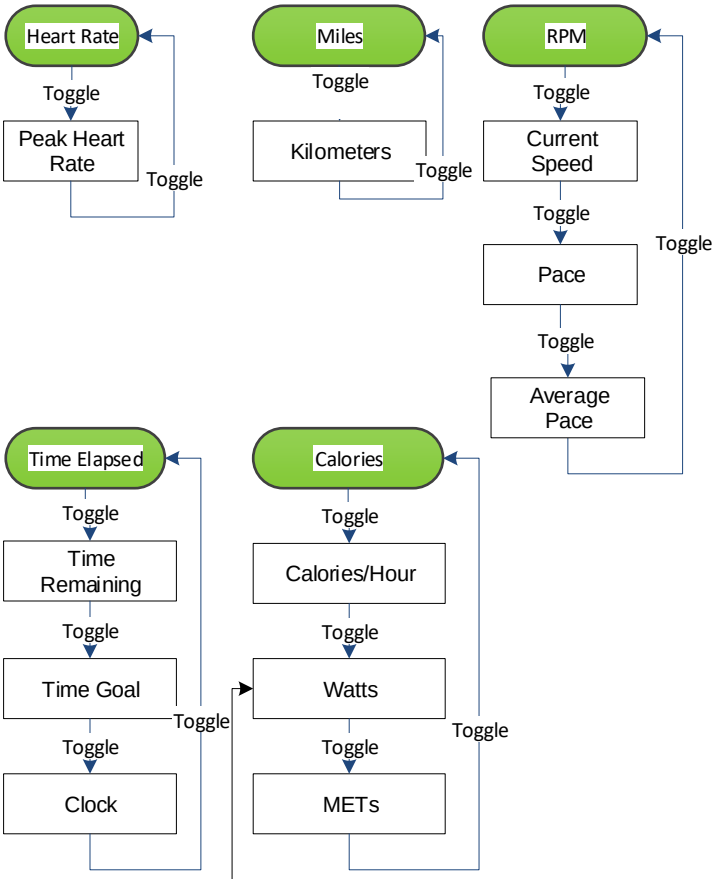
Workout Home Screen

NOTE

1. If the screen is locked all <u>onscreen</u> buttons except the lock/unlock button will stop responding/working until the screen is unlocked.
2. All physical buttons (Stop, E-Stop, Speed/Resistance/Incline Up, etc.) will work the same when the screen is locked as when it is unlocked.

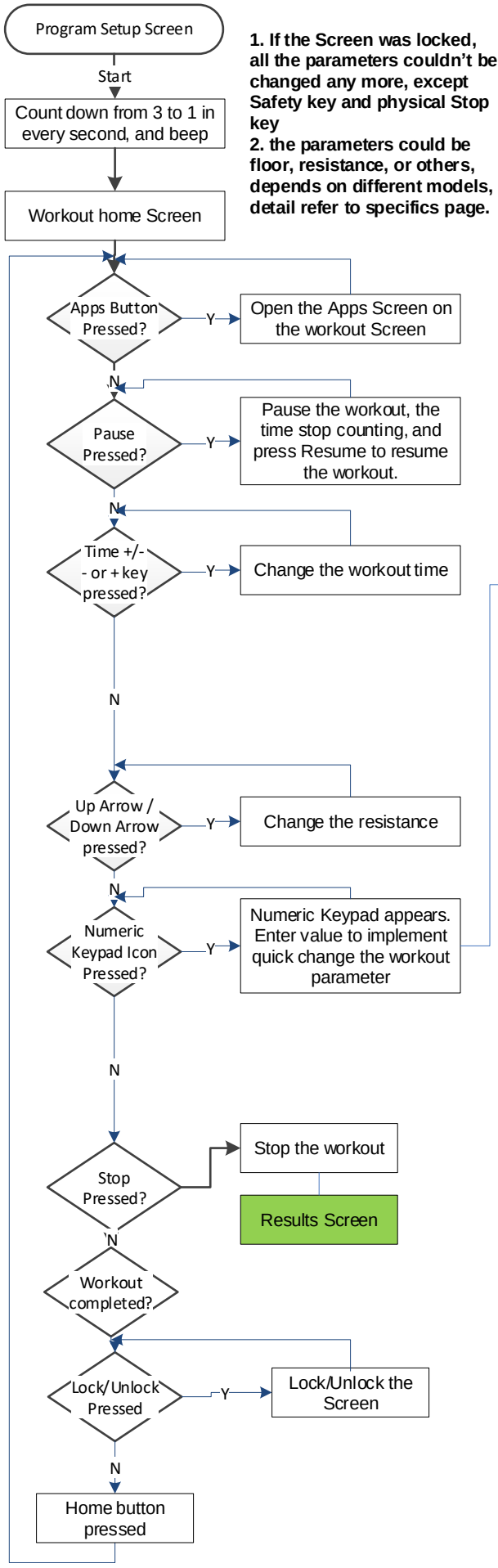
<u>Unlocked</u>

<u>Locked</u>



Not part of 30-Series

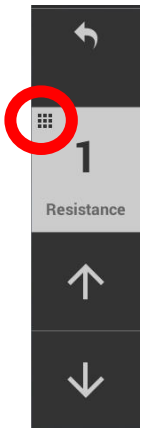
Workout Screen (C)

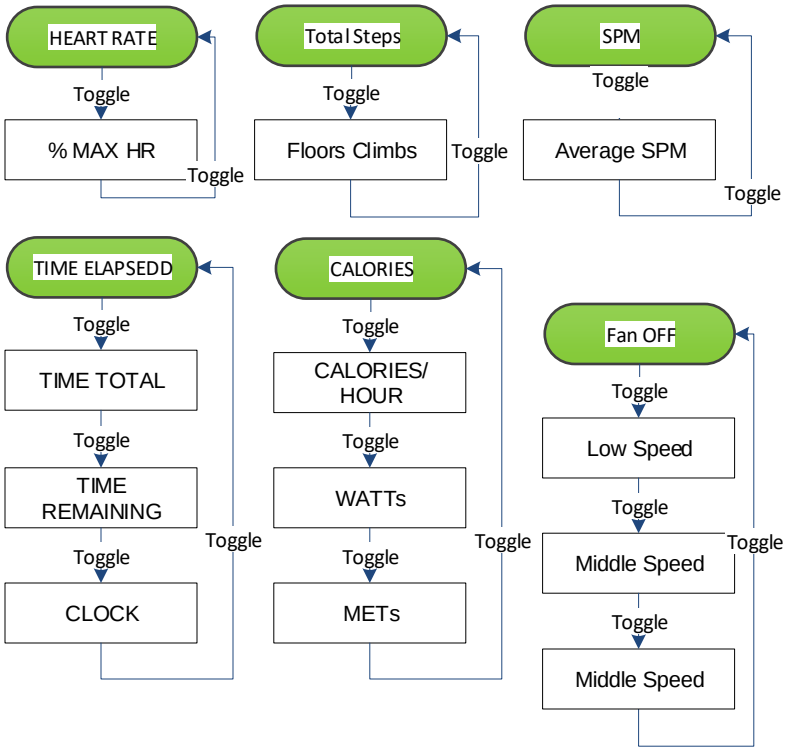


1. If the Screen was locked, all the parameters couldn't be changed any more, except Safety key and physical Stop key
2. the parameters could be floor, resistance, or others, depends on different models, detail refer to specifics page.

Workout Home Screen

Numeric Keypad Icon

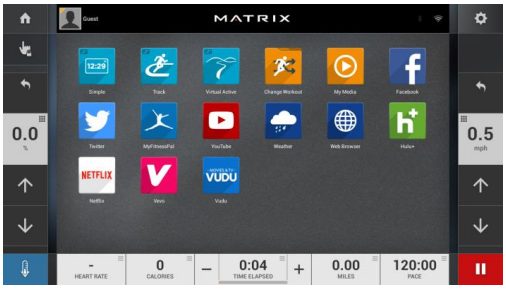




Workout Home Screen Apps (not including Workout Specific Apps)

Simple App

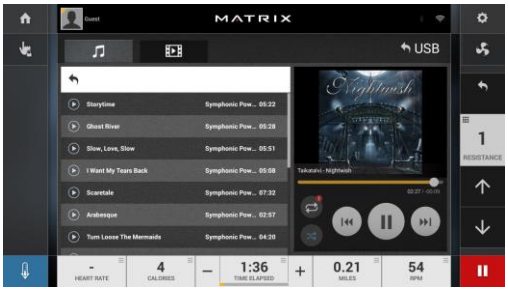
Home Screen



Track App

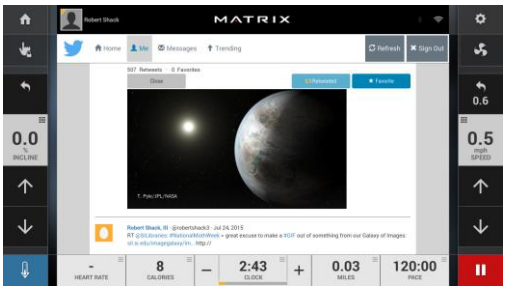
Change Workout App

My Media App

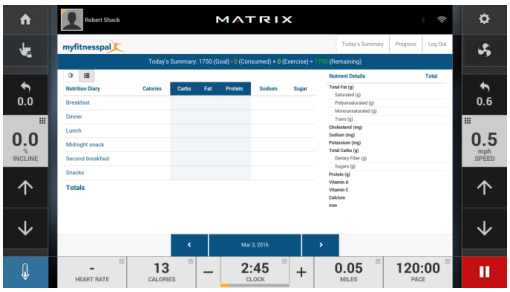


Facebook App

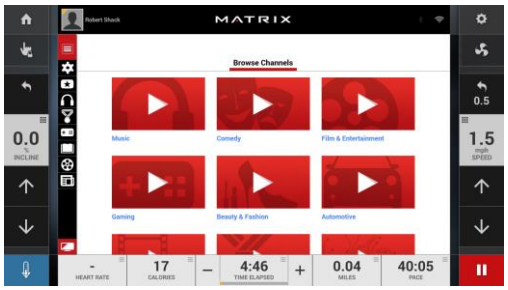
Twitter App



MyFitnessPal App

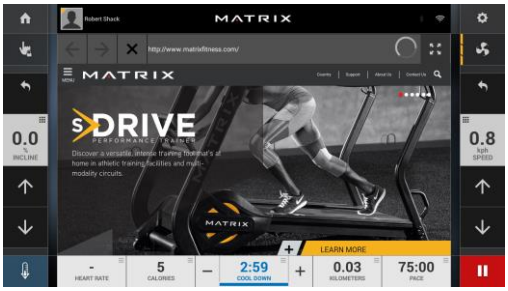


Youtube App

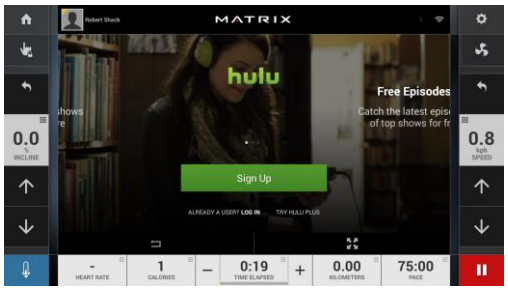


Weather App

Browser App

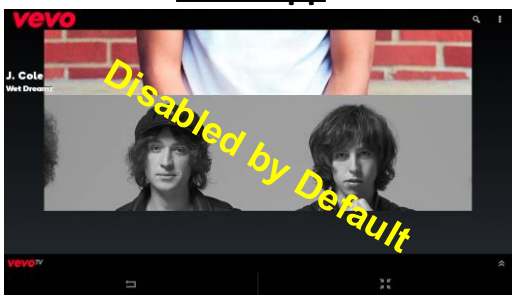


Hulu App



Netflix App

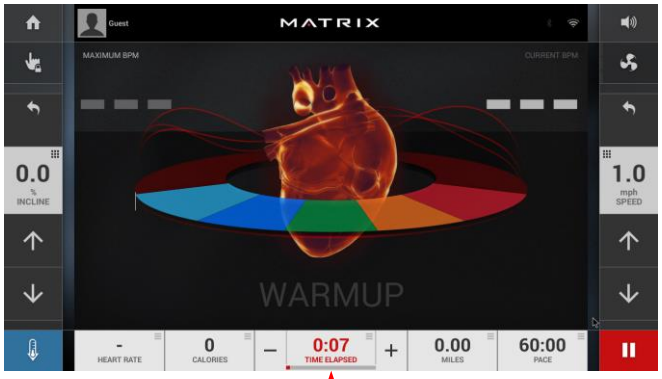
Vevo App



Vudu App

Workout Screen Base Layout Components

Blue Text Indicates Cool Down.



Red Text Indicates Warm Up.

Stats per Column and Frame

Column 1		Column 2		Column 3		Column 4		Column 5	
Stat	**Frames**	**Stat**	**Frames**	**Stat**	**Frames**	**Stat**	**Frames**	**Stat**	**Frames**
Heart Rate	TUREAC	Calories	TUREAC	Time Elapsed	TUREAC	Distance (Imperial)	TUREA	Pace	TUREA
Peak Heart Rate	TUREAC	Calories Per Hour	TUREAC	Goal Remaining	TUREAC	Distance (Metric)	TUREA	Average Pace	TUREA
		Watts	TUREAC	Total Goal	TUREAC	Steps	C	Elevation	T
		METS	TUREAC	Clock	TUREAC	Floors	C	RPM	UREA
								Speed	UREA
								SPM	C
								Average SPM	C

Note: Goal depends on the workout and frame. It can be Time, Distance, Calories, Floors, or Elevation/Height. Additionally, this column will indicate workout stage if applicable. Clock refers to the current time of day.

Note: Pace = Min/Mile or km

Treadmill uses Target Pace which is based on the target speed set by the user or program. This is because the pace would noticeably shift in value while the treadmill ramps up/down to the target.

Workout Summary I

- The share buttons only show if the user has connected their accounts with DAPI.
- Only the apps the user has connected show up.
- The Screen Timeout timer will cause the workout summary screen to exit and go to the welcome screen. This timer resets whenever the user interacts with the console.
- The timeout is the screen timeout value retrieved from system config.
- Home Button causes the software to close the workout summary screen and go to the welcome screen.The stats are scrollable.
- The stats shown depend on the workout and machine type.
- Always show warm up and cool down even if they were not run (use '-' for missing stats).
- For Splits (i.e., Split #, Split Time, Split Distance, Total Laps, Best Lap Time):

  List values in the Workout and Total Columns, these values will be equal. The other columns will list '-'

  Laps are distance/(400M or .25mi)

  For splits, each split will get listed vertically like this:

	Warm-Up	Workout	Cool Down	Total
Split #	-	1	-	1
Split Time	-	1:58	-	1:58
Split Distance	-	0.5mi	-	0.5mi
Split #	-	2	-	2
Split Time	-	2:50	-	2:50
Split Distance	-	0.75mi	-	0.75mi

The My Fitness Pal box shows up only if the user has connected their account to MFP.

Workout Reporting

1 – Workouts completed by users logged in with an xID will have their workouts reported to DAPI (viafitness.com) and Netpulse. These workouts will be associated with their account.

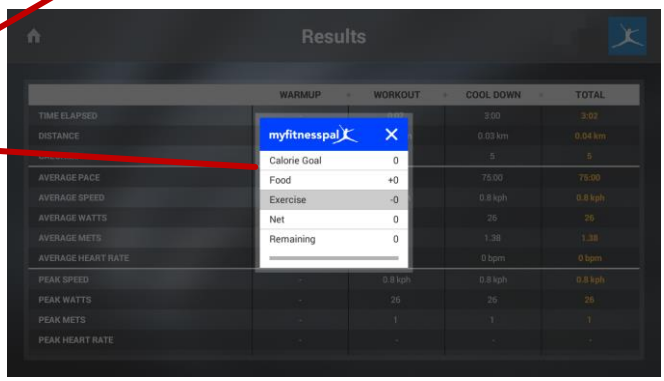
2 – Workouts completed by Guest users and local (non-xID) account users will also have their workouts reported to DAPI if the console is connected to the internet.

a – In this instance the UUID of the user is set to 00000000-0000-0000-0000-000000000000 and the facility ID is set to 0. This is so no uniquely identifying information about the user is sent to DAPI.

b – These workouts are only viewable in Asset Management for analytics purposes (what workouts do people run most).

Results: Not Connected

Results: Connected



Results: Connected, No My Fitness Pal Account

Workout Summary Tables

Note: 30-Series Machines will NOT display Watts (Peak or Average)

Manual Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	x
Total Steps				x
Total Floors				
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Fat Burn Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				x
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline		x	x	
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Interval Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	x
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				x
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Constant Watts Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed		x	x	
Distance (Mi or Km)		x	x	
Total Steps				
Total Floors				
Calories		x	x	
Average Pace (Time per Mile)		x	x	
Average Speed (MPH or KPH)		x	x	
Average Steps per Minute				
Average Watts		x	x	
Average METs		x	x	
Average RPM		x	x	
Average Heart Rate		x	x	
Average Resistance		x	x	
Peak Speed (MPH or KPH)		x	x	
Peak Steps per Minute				
Peak Watts		x	x	
Peak METs		x	x	
Peak RPM		x	x	
Peak Heart Rate		x	x	
Peak Incline		x		
Peak Resistance		x	x	
Elevation				
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #		x	x	
Split Time		x	x	
Split Distance		x	x	
Total Laps (400 M/ 25 mi)		x	x	
Best (Lap) Time		x	x	

Rolling Hills Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				x
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

% Target Heart Rate Speed Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x			
Distance (Mi or Km)	x			
Total Steps				
Total Floors				
Calories	x			
Average Pace (Time per Mile)	x			
Average Speed (MPH or KPH)	x			
Average Steps per Minute				
Average Watts	x			
Average METs	x			
Average RPM				
Average Heart Rate	x			
Average Resistance				
Peak Speed (MPH or KPH)	x			
Peak Steps per Minute				
Peak Watts	x			
Peak METs	x			
Peak RPM				
Peak Heart Rate	x			
Peak Incline	x			
Peak Resistance				
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x			
Split Time	x			
Split Distance	x			
Total Laps (400 M/ 25 mi)	x			
Best (Lap) Time	x			

% Target Heart Rate Resistance/Level Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed		x	x	x
Distance (Mi or Km)		x	x	
Total Steps				x
Total Floors				x
Calories		x	x	x
Average Pace (Time per Mile)		x	x	
Average Speed (MPH or KPH)		x	x	
Average Steps per Minute				x
Average Watts		x	x	x
Average METs		x	x	x
Average RPM		x	x	
Average Heart Rate		x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)		x	x	
Peak Steps per Minute				x
Peak Watts		x	x	x
Peak METs		x	x	x
Peak RPM		x	x	
Peak Heart Rate		x	x	x
Peak Incline		x		
Peak Resistance		x	x	
Elevation				
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #		x	x	
Split Time		x	x	
Split Distance		x	x	
Total Laps (400 M/ 25 mi)		x	x	
Best (Lap) Time		x	x	

% Target Heart Rate Incline Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x		x	
Distance (Mi or Km)	x		x	
Total Steps				
Total Floors				
Calories	x		x	
Average Pace (Time per Mile)	x		x	
Average Speed (MPH or KPH)	x		x	
Average Steps per Minute				
Average Watts	x		x	
Average METs	x		x	
Average RPM			x	
Average Heart Rate	x		x	
Average Resistance			x	
Peak Speed (MPH or KPH)	x		x	
Peak Steps per Minute				
Peak Watts	x		x	
Peak METs	x		x	
Peak RPM			x	
Peak Heart Rate	x		x	
Peak Incline	x		x	
Peak Resistance			x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x		x	
Split Time	x		x	
Split Distance	x		x	
Total Laps (400 M/ 25 mi)	x		x	
Best (Lap) Time	x		x	

Calorie Goal Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x			
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Distance/Floor Goal Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	x
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				x
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Sprint 8 Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	
Distance (Mi or Km)	x	x	x	
Total Steps				
Total Floors				
Calories	x	x	x	
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				
Average Watts	x	x	x	
Average METs	x	x	x	
Average RPM		x	x	
Average Heart Rate	x	x	x	
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				
Peak Watts	x	x	x	
Peak METs	x	x	x	
Peak RPM		x	x	
Peak Heart Rate	x	x	x	
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed	x	x	x	
SB Active Recovery Segments Completed	x	x	x	
SB Average Sweat Score (joules)	x	x	x	
SB Peak Sweat Score (joules)	x	x	x	
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Virtual Active Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				x
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Time Goal Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed	x	x	x	x
Distance (Mi or Km)	x	x	x	x
Total Steps				x
Total Floors				x
Calories	x	x	x	x
Average Pace (Time per Mile)	x	x	x	
Average Speed (MPH or KPH)	x	x	x	
Average Steps per Minute				
Average Watts	x	x	x	x
Average METs	x	x	x	x
Average RPM		x	x	
Average Heart Rate	x	x	x	x
Average Resistance		x	x	
Peak Speed (MPH or KPH)	x	x	x	
Peak Steps per Minute				x
Peak Watts	x	x	x	x
Peak METs	x	x	x	x
Peak RPM		x	x	
Peak Heart Rate	x	x	x	x
Peak Incline	x	x		
Peak Resistance		x	x	
Elevation	x			
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #	x	x	x	
Split Time	x	x	x	
Split Distance	x	x	x	
Total Laps (400 M/ 25 mi)	x	x	x	
Best (Lap) Time	x	x	x	

Landmarks Workout Summary

Data Points	Treadmill	Ascent	HURE	CS
Time Elapsed				x
Distance (Mi or Km)				
Total Steps				x
Total Floors				x
Calories Burned				x
Average Time per Mile				
Average Speed/Pace (MPH or KPH)				
Average Steps per Minute				x
Average Watts				x
Average METs				x
Average RPM				
Average Heart Rate				x
Average Resistance				
Peak Speed/Pace (MPH or KPH)				
Peak Steps per Minute				x
Peak Watts				x
Peak METs				x
Peak RPM				
Peak Heart Rate				x
Peak Incline				
Peak Resistance				
Elevation				
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #				
Split Time				
Split Distance				
Total Laps (400 M/ 25 mi)				
Best Lap Time				

Glutes Workout Summary

Data Points	Treadmill	Ascent	URE	Climbmill
Time Elapsed		x		
Distance (Mi or Km)		x		
Total Steps				
Total Floors				
Calories		x		
Average Pace (Time per Mile)				
Average Speed (MPH or KPH)		x		
Average Steps per Minute				
Average Watts		x		
Average METs		x		
Average RPM		x		
Average Heart Rate		x		
Average Resistance		x		
Peak Speed (MPH or KPH)		x		
Peak Steps per Minute				
Peak Watts		x		
Peak METs		x		
Peak RPM		x		
Peak Heart Rate		x		
Peak Incline		x		
Peak Resistance		x		
Elevation				
SB Sprint Segments Completed				
SB Active Recovery Segments Completed				
SB Average Sweat Score (joules)				
SB Peak Sweat Score (joules)				
Fitness Test Result				
Split #		x		
Split Time		x		
Split Distance		x		
Total Laps (400 M/ 25 mi)		x		
Best (Lap) Time		x		

Workout Map

✓ = included, O = optional, X = not available

Console	xer	xer							xir	xir						
Category	Treadmill	Bikes	Bikes	Elliptical	Elliptical	Ascent	Ascent	Climbmill	Treadmill	Bikes	Bikes	Elliptical	Elliptical	Ascent	Ascent	Climbmill
Platform	T	U / R 30	U / R 50	E30	E50	A30	A50	C50	T	U / R 30	U / R 50	E30	E50	A30	A50	C50
THR / Heart Rate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
incline	X	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X
speed	✓	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X
resistance	X	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
Training	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
manual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
fat burn	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓
rolling hills	✓	X	X	X	X	X	X	X	✓	✓	✓	✓	✓	X	X	✓
intervals (resistance)	X	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
intervals (incline)	✓	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X
constant watts	X	X	✓	X	✓	X	✓	X	X	X	✓	X	✓	X	✓	X
glutes	X	X	X	X	X	X	X	X	X	X	X	X	X	✓	✓	X
Goals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
time	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
distance	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	X
floors	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	✓
calorie	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sprint 8	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	X
Virtual Active	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Landmarks	X	X	X	X	X	X	X	✓	X	X	X	X	X	X	X	✓

Cool Down Algorithm:

All workouts will have a cool down (Note: this still requires a cool down section in the xml).

The kind of cool down (optional vs. mandatory) is defined by the workout xml, if it's a standard cool down it's optional.

In the event the cool down is not optional the workout's logic dictates how/when the cool down is entered. This includes whether the user can still manually enter the cool down. If there is no logic and the cool down is mandatory then the cool down will always be entered at the end of the workout or can be manually skipped to with the cool down button.

When optional the user must press the cool down button and confirm, otherwise when the workout ends the cool down is skipped.

Default (minimum) cool down length is determined by system settings unless specified by the workout xml.

Default Max adjustment cool down will also be determine by system settings where the maximum times a user can increase the cool down time = Maximum Cool Down Adjustment Time - Cool Down Time. Cannot change the cool down length or intensity if it's defined in the xml.

Unless specified by the workout xml the default cool down behavior is as follows:

Settings do not change until the user confirms to enter the cool down.

The cool down quick key requires user confirmation same as pressing the on screen cool down button.

Speed is set to 60% of the current speed when entering cool down or 4.0MPH, whichever is smaller.

Incline is set to 0.

Resistance (or Level for say climbmill) is set to 1.

Warm Up Algorithm:

Only certain workouts will have a warm up as indicated by their xml file.

This includes if the warm up can be skipped by pressing the 'Go' quick key (noSkipWarmup). Default behavior is no skipping on most machines as there is no quick key.

The default warm up length is 2 minutes unless specified by the workout xml, the user cannot change this and it cannot be changed in settings.

The intensity (level, speed, incline, etc.) of the warm up is user defined on the Go Screen and during the warm up unless otherwise specified in the xml file.

Workout length can be adjusted during the warm up unless specified by the workout xml that it cannot be changed (goalValueFixed, ignoreUserGoalChanges).

Workout – Default Behaviors II

Pause Algorithm:

Workouts can define if a user can pause during the workout or if doing so ends the workout (fitness tests do this).

When a user presses pause a popup appears notifying the user of the pause. This popup gives the user the option to resume or end the workout.It also has a timer that will close the popup and end the workout without any action from the user when it ends. The length of this timer is defined by the system settings (default is 5 minutes).

While the system is paused:

Speed is set to 0.

Incline is held in place.

Resistance/Level is set to 1.

If the user resumes the workout:

Speed is set to the system minimum.

Incline resumes moving to or staying at its current value before pausing.

Resistance/Level reverts to its value before pausing unless the machine is a Climbmill which remains at 1.

For Climbmill and Treadmill a workout can specify that it resume at its values before pausing. Currently when resuming from pause all workouts will be set to the machine's minimum speed and (climbmill) level (note that this does not affect settings changes when transitioning to a new workout stage/interval).

Pedaling Algorithm:

On Bike, Elliptical and Ascent frames (UREA) if the user stops pedaling long enough for the RPM to be 0 for 5 seconds the console will automatically pause and produce the pause popup and other behavior described above. If the user begins pedaling again the console will automatically unpause and resume the workout.

This automatic pause/unpause only occurs when the pause was caused by the console detecting 0 RPM. If the user manually pauses the console they can continue to pedal and accumulate distance, calories, etc. even though the workout and time is paused.

Note: The grade map only refers to the treadmill and its associated workouts.

Level	%Maximum Grade
1	3.0
2	3.5
3	4.0
4	4.5
5	5.0
6	5.5
7	6.0
8	6.5
9	7.0
10	8.0
11	9.0
12	9.5
13	10.0
14	10.5
15	11.0
16	12.0
17	12.5
18	13.0
19	14.0
20	15.0

Workout – Intervals Incline (TM)

% Max Elevation	Level / Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1	1	1	1	1.5	1.5	1.5	1.5	1.5
0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	4	1.5	2	2	2.5	3	3	3.5	3.5	4	4.5	5	5.5	5.5	6	6	6.5	7	7	8	8.5
0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	6	2.5	2.5	3	3.5	4	4.5	4.5	5	5.5	6	7	7.5	8	8	8.5	9.5	9.5	10	11	11.5
0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	8	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	9.5	10	10.5	11	12	12.5	13	14	15
0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	10	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	9.5	10	10.5	11	12	12.5	13	14	15
0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	12	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	9.5	10	10.5	11	12	12.5	13	14	15
0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	14	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	9.5	10	10.5	11	12	12.5	13	14	15
0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	16	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	9.5	10	10.5	11	12	12.5	13	14	15

Change the incline every segment (workout time/16)

A Note About Workouts With Predefined Segments: The level selected for a workout is used to dictate the Incline and/or Resistance per segment, in accordance with the table. The workout lasts for 16 segments of equal temporal length. The segment timeis determined by dividing the number of segments by the workout time.

Example: If the user selects a workout length of 30 minutes, each segment lasts 1 minute and 52.5 seconds. (30 min / 16 = 1.875 min).

If the user adjusts the time of the workout, during the workout, the new remaining length of the workout is evenly distributed across the remaining segments including the current segment. In the event of a reduction in workout time if the new segment length is less than the elapsed time in the current segment then the current segment will end and the next segment will start with the new distributed length.

Example: If the user started a 30 minute workout and in the 6th segment adds 5 minutes then segments 6-16 get 27.3 seconds added to their lengths. (5 min /11 = .45 min).

Workout – Intervals Resistance/Incline i.e, Level (UREA) 50-Series and Climbmill

Level / Segment	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20	
	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r
1	0	1	25	1	25	1	25	4	25	4	25	5	25	5	25	5	25	6	25	6	25	6	25	7	25	7	25	7	25	10	25	10	25	10	25	11	25	11	25	12
2	0	4	25	5	25	5	25	5	30	6	30	6	30	6	30	6	35	7	35	7	40	10	40	10	40	10	45	11	45	11	50	12	55	13	60	16	65	17	70	18
3	0	1	15	1	20	4	20	4	20	4	25	5	25	5	25	5	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	50	12
4	0	5	25	5	30	6	30	6	30	6	35	7	35	7	40	10	40	10	40	10	45	11	45	11	50	12	50	12	55	14	60	16	70	18	70	18	75	20	80	22
5	0	1	15	1	20	4	20	4	20	4	25	5	25	5	25	5	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	50	12
6	0	5	30	6	30	6	35	7	35	8	40	10	40	10	45	11	45	11	50	12	50	12	55	14	55	14	60	16	60	16	70	18	80	22	80	22	85	23	90	24
7	0	1	20	4	20	4	25	5	30	6	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	45	11	50	12	55	14	60	16
8	0	6	30	6	35	7	40	10	45	11	50	12	50	12	55	14	60	16	65	17	70	18	75	20	80	22	85	23	90	24	90	24	95	25	100	28	100	29	100	30
9	0	1	20	4	20	4	25	5	30	6	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	45	11	50	12	55	13	60	16
10	0	6	30	6	35	7	40	10	45	11	50	12	50	12	55	14	60	16	65	17	70	18	75	20	80	22	85	23	90	24	90	24	95	25	100	28	100	29	100	30
11	0	1	20	4	20	4	25	5	30	6	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	45	10.8	50	12	55	13	60	16
12	0	6	30	6	35	7	40	10	45	11	50	12	50	12	55	14	60	16	65	17	70	18	75	20	80	22	85	23	90	24	90	24	95	25	100	27	100	29	100	30
13	0	1	20	4	20	4	25	5	30	6	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	45	11	50	12	55	13	60	16
14	0	4	25	5	30	6	30	6	35	8	35	7	40	10	40	10	45	11	45	11	50	12	50	12	55	14	55	14	60	16	65	17	70	18	75	20	80	22	85	23
15	0	1	15	1	15	1	20	4	20	3	25	5	25	5	25	5	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	50	12
16	0	1	15	1	15	1	20	4	20	3	25	5	25	5	25	5	30	6	30	6	30	6	35	7	35	7	35	7	40	10	40	10	40	10	45	11	45	11	50	12

e - elevation
r - resistance

Workout – Intervals Resistance/Incline i.e, Level (UREA) 30-Series

Level / Segment	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20	
	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r
1	0	1	25	1	25	1	25	3	25	3	25	3	25	4	25	4	25	4	25	4	25	4	25	5	25	5	25	5	25	6	25	6	25	7	25	7	25	7	25	8
2	0	3	25	3	25	4	25	4	30	4	30	4	30	4	30	4	35	5	35	5	40	6	40	6	40	6	45	7	45	7	50	8	55	9	60	11	65	12	70	12
3	0	1	15	1	20	3	20	3	20	3	25	3	25	3	25	3	30	4	30	4	30	4	35	5	35	5	35	5	40	6	40	6	40	6	45	7	45	7	50	8
4	0	3	25	4	30	4	30	4	30	4	35	5	35	5	40	7	40	7	40	7	45	7	45	7	50	8	50	8	55	9	60	11	70	12	70	12	75	13	80	15
5	0	1	15	1	20	3	20	3	20	3	25	3	25	3	25	3	30	4	30	4	30	4	35	5	35	5	35	5	40	6	40	6	40	6	45	7	45	7	50	8
6	0	3	30	4	30	4	35	5	35	5	40	7	40	7	45	7	45	7	50	8	50	8	55	9	55	9	60	11	60	11	70	12	80	15	80	15	85	15	90	16
7	0	1	20	3	20	3	25	4	30	4	30	4	30	4	30	4	35	5	35	5	35	5	40	7	40	7	40	7	45	7	45	7	45	7	50	8	55	9	60	11
8	0	4	30	4	35	5	40	7	45	7	50	8	50	8	55	9	60	11	65	11	70	12	75	13	80	15	85	15	90	16	90	16	95	17	100	19	100	19	100	20
9	0	1	20	3	20	3	25	3	30	4	30	4	30	4	30	4	35	5	35	5	35	5	40	7	40	7	40	7	45	7	45	7	45	7	50	8	55	9	60	11
10	0	4	30	4	35	4	40	7	45	7	50	8	50	8	55	9	60	11	65	11	70	12	75	13	80	15	85	15	90	16	90	16	95	17	100	19	100	19	100	20
11	0	1	20	3	20	3	25	3	30	4	30	4	30	4	30	4	35	5	35	5	35	5	40	7	40	7	40	7	45	7	45	7	45	7	50	8	55	9	60	11
12	0	4	30	4	35	5	40	7	45	7	50	8	50	8	55	9	60	11	65	11	70	12	75	13	80	15	85	15	90	16	90	16	95	17	100	19	100	19	100	20
13	0	1	20	3	20	3	25	3	30	4	30	4	30	4	30	4	35	5	35	5	35	5	40	7	40	7	40	7	45	7	45	7	45	7	50	8	55	9	60	11
14	0	3	25	3	30	4	30	4	35	5	35	5	40	7	40	7	45	7	45	8	50	8	50	8	55	9	55	9	60	11	65	11	70	12	75	13	80	15	85	16
15	0	1	15	1	15	1	20	3	20	3	25	3	25	3	25	3	30	4	30	4	30	4	35	5	35	5	35	5	40	6	40	7	40	7	45	8	45	7	50	8
16	0	1	15	1	15	1	20	2	20	3	25	3	25	3	25	3	30	4	30	4	30	4	35	5	35	5	35	5	40	6	40	7	40	7	45	8	45	7	50	8

e - elevation
r - resistance

A Note About Workouts With Predefined Segments: The level selected for a workout is used to dictate the Incline and/or Resistance per segment, in accordance with the table. The workout lasts for 16 segments of equal temporal length. The segment time is determined by dividing the number of segments by the workout time.

Example: If the user selects a workout length of 30 minutes, each segment lasts 1 minute and 52.5 seconds. (30 min / 16 = 1.875 min).

If the user adjusts the time of the workout, during the workout, the new remaining length of the workout is evenly distributed across the remaining segments including the current segment. In the event of a reduction in workout time if the new segment length is less than the elapsed time in the current segment then the current segment will end and the next segment will start with the new distributed length.

Example: If the user started a 30 minute workout and in the 6th segment adds 5 minutes then segments 6-16 get 27.3 seconds added to their lengths. (5 min /11 = .45 min).

Workout – Rolling Hills (TM)

Note: Elevation = Incline, % Max Elevation is a goal modifier for creating the actual chart to the right.

% Max Elevation	Level / Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation	elevation
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1	1	1	1	1.5	1.5	1.5	1.5	1.5
20	3	0.5	1	1	1	1	1	1.5	1.5	1.5	2	2	2	2	2.5	2.5	2.5	3	3	3	3.5
30	4	1	1	1.5	1.5	1.5	2	2	2	2.5	2.5	3	3	3.5	3.5	3.5	4	4	4.5	4.5	5
40	5	1.5	1.5	2	2	2	2.5	2.5	3	3	3.5	4	4	4.5	4.5	5	5.5	5.5	6	6	6.5
20	6	0.5	1	1	1	1	1	1.5	1.5	1.5	2	2	2	2	2.5	2.5	2.5	3	3	3	3.5
0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1	1	1	1	1.5	1.5	1.5	1.5	1.5
50	9	1.5	2	2	2.5	3	3	3.5	3.5	4	4.5	5	5.5	5.5	6	6	6.5	7	7	8	8.5
80	10	2.5	3	3.5	4	4.5	5	5.5	6	6	7	8	8.5	9	9.5	10	10.5	11	11.5	12.5	13.5
90	11	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	9.5	10	10.5	11	12	12.5	13	14	15
70	12	2.5	2.5	3	3.5	4	4.5	4.5	5	5.5	6	7	7.5	8	8	8.5	9.5	9.5	10	11	11.5
30	13	1	1	1.5	1.5	1.5	2	2	2	2.5	2.5	3	3	3.5	3.5	3.5	4	4	4.5	4.5	5
0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	15	1	1	1.5	1.5	1.5	2	2	2	2.5	2.5	3	3	3.5	3.5	3.5	4	4	4.5	4.5	5
40	16	1.5	1.5	2	2	2	2.5	2.5	3	3	3.5	4	4	4.5	4.5	5	5.5	5.5	6	6	6.5

A Note About Workouts With Predefined Segments: The level selected for a workout is used to dictate the Incline and/or Resistance per segment, in accordance with the table. The workout lasts for 16 segments of equal temporal length. The segment time is determined by dividing the number of segments by the workout time.

Example: If the user selects a workout length of 30 minutes, each segment lasts 1 minute and 52.5 seconds. (30 min / 16 = 1.875 min).

If the user adjusts the time of the workout, during the workout, the new remaining length of the workout is evenly distributed across the remaining segments including the current segment. In the event of a reduction in workout time if the new segment length is less than the elapsed time in the current segment then the current segment will end and the next segment will start with the new distributed length.

Example: If the user started a 30 minute workout and in the 6th segment adds 5 minutes then segments 6-16 get 27.3 seconds added to their lengths. (5 min /11 = .45 min).

Workout – Rolling Hills (UREA) 50-Series and Climbmill

Level / Segment	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20	
	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r
1	0	1	25	1	25	1	25	4	25	4	25	4	25	5	25	5	25	6	25	6	25	7	25	7	25	10	25	11	25	11	25	12	25	13	25	16	25	17	25	18
2	0	1	10	4	10	4	10	4	15	5	15	5	15	5	20	6	25	7	25	7	30	10	30	10	35	11	40	12	45	13	50	17	55	17	60	18	65	19	70	22
3	0	4	10	4	15	5	20	6	20	6	20	6	20	6	20	6	25	7	30	10	35	11	40	12	45	13	50	16	55	17	60	18	65	19	70	22	75	23	80	24
4	0	4	15	5	15	5	20	6	20	6	25	7	25	7	25	7	30	10	35	11	40	12	45	13	50	16	55	17	60	18	65	19	70	22	75	23	80	24	85	25
5	0	5	20	6	20	6	20	6	25	7	30	10	30	10	35	11	40	12	45	14	50	16	55	17	60	18	65	20	70	22	75	23	80	24	85	25	90	28	95	29
6	0	5	20	6	20	6	25	7	25	7	30	10	35	11	40	12	45	14	50	16	55	17	60	18	65	20	70	22	75	23	80	24	85	25	90	28	95	29	100	30
7	0	5	20	6	20	6	20	6	25	7	30	10	30	10	35	11	40	12	45	13	50	16	55	17	60	18	65	20	70	22	75	23	80	24	85	25	90	28	95	29
8	0	4	15	5	15	5	20	6	20	6	25	7	25	7	25	7	30	10	35	11	40	12	45	14	50	16	55	17	60	18	65	19	70	22	75	23	80	24	85	25
9	0	4	10	4	15	5	15	5	15	5	15	5	20	6	20	6	20	6	25	7	30	10	35	10.8	40	12	45	13	50	16	55	17	60	18	65	19	70	22	75	23
10	0	1	10	4	10	4	10	4	15	5	15	5	20	6	20	6	20	6	25	7	25	7	30	10	30	10	40	12	50	16	55	17	60	18	65	19	70	22	75	23
11	0	4	15	5	15	5	20	6	20	6	25	7	25	7	25	7	30	10	35	11	40	12	45	13	50	16	55	17	60	18	65	19	70	22	75	23	80	24	85	25
12	0	5	20	6	20	6	20	6	25	7	30	10	30	10	35	11	40	12	45	14	50	16	55	17	60	18	65	19	70	22	75	23	80	24	85	25	90	28	95	29
13	0	6	20	6	20	6	25	7	25	7	30	10	35	11	40	12	45	14	50	16	55	17	60	18	65	20	70	22	75	23	80	24	85	25	90	28	95	29	100	30
14	0	6	20	6	20	6	20	6	25	7	30	10	30	10	35	11	40	12	45	13	50	16	55	17	60	18	65	20	70	22	75	23	80	24	85	25	90	28	95	29
15	0	4	15	5	15	5	20	6	20	6	25	7	25	7	25	7	30	10	35	11	40	12	45	13	50	16	55	17	60	18	65	19	70	22	75	23	80	24	85	25
16	0	1	5	1	5	1	10	4	10	4	10	4	15	5	15	5	20	6	20	6	20	6	25	7	30	10	35	11	35	11	40	12	45	13	50	16	55	17	60	18

e - elevation

r - resistance

Change the incline & resistance every segment (workout time/16)

Workout – Rolling Hills (UREA) 30-Series

Level / Segment	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20	
	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r	e	r
1	0	1	25	1	25	1	25	2	25	2	25	2	25	3	25	3	25	4	25	4	25	5	25	5	25	6	25	7	25	7	25	8	25	9	25	11	25	11	25	12
2	0	1	10	2	10	2	10	3	15	3	15	3	15	3	20	4	25	5	25	5	30	6	30	6	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	15
3	0	2	10	2	15	3	20	4	20	4	20	4	20	4	20	4	25	5	30	6	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	14	75	15	80	16
4	0	2	15	3	15	3	20	4	20	4	25	5	25	5	25	5	30	6	35	7	40	8	45	9	50	10	55	12	60	12	65	13	70	14	75	15	80	16	85	17
5	0	3	20	4	20	4	20	4	25	5	30	6	30	6	35	7	40	8	45	9	50	10	55	11	60	12	65	13	70	15	75	15	80	16	85	17	90	18	95	19
6	0	3	20	4	20	4	25	4	25	5	30	6	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	14	75	15	80	16	85	17	90	18	95	19	100	20
7	0	3	20	4	20	4	20	4	25	5	30	6	30	6	35	7	40	8	45	9	50	10	55	11	60	12	65	13	70	14	75	15	80	16	85	17	90	18	95	19
8	0	2	15	3	15	3	20	4	20	4	25	5	25	5	25	5	30	6	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	15	75	15	80	16	85	17
9	0	2	10	2	15	3	15	3	15	3	15	3	20	4	20	4	20	4	25	5	30	6	35	7	40	8	45	8.8	50	11	55	12	60	12	65	13	70	14	75	15
10	0	1	10	2	10	2	10	2	15	3	15	3	20	4	20	4	20	4	25	5	25	5	30	6	30	6	40	8	50	11	55	12	60	12	65	13	70	14	75	15
11	0	2	15	3	15	3	20	4	20	4	25	5	25	5	25	5	30	7	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	15	75	15	80	16	85	17
12	0	3	20	4	20	4	20	4	25	5	30	6	30	6	35	7	40	8	45	9	50	10	55	11	60	12	65	13	70	15	75	15	80	16	85	17	90	18	95	19
13	0	3	20	4	20	4	25	5	25	5	30	6	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	15	75	15	80	16	85	17	90	19	95	19	100	20
14	0	3	20	4	20	4	20	4	25	5	30	6	30	6	35	7	40	8	45	9	50	10	55	11	60	12	65	13	70	14	75	15	80	16	85	17	90	18	95	19
15	0	2	15	3	15	3	20	4	20	4	25	5	25	5	25	5	30	7	35	7	40	8	45	9	50	11	55	11	60	12	65	13	70	15	75	15	80	16	85	17
16	0	1	5	1	5	1	10	2	10	2	10	2	15	3	15	3	20	4	20	4	20	4	25	5	30	7	35	7	35	7	40	8	45	9	50	10	55	11	60	12

e - elevation

r - resistance

Change the incline & resistance every segment (workout time/16)

A Note About Workouts With Predefined Segments: The level selected for a workout is used to dictate the Incline and/or Resistance per segment, in accordance with the table. The workout lasts for 16 segments of equal temporal length. The segment time is determined by dividing the number of segments by the workout time.

Example: If the user selects a workout length of 30 minutes, each segment lasts 1 minute and 52.5 seconds. (30 min / 16 = 1.875 min).

If the user adjusts the time of the workout, during the workout, the new remaining length of the workout is evenly distributed across the remaining segments including the current segment. In the event of a reduction in workout time if the new segment length is less than the elapsed time in the current segment then the current segment will end and the next segment will start with the new distributed length.

Example: If the user started a 30 minute workout and in the 6th segment adds 5 minutes then segments 6-16 get 27.3 seconds added to their lengths. (5 min /11 = .45 min).

Workout – Fat Burn (UREA) 30-Series

Level / Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r	r
1	1	1	3	3	4	4	5	5	6	6	8	8	9	9	10	10	11	11	13	14
2	4	4	5	6	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	19
3	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
4	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
5	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
6	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
7	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
8	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
9	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
10	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
11	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
12	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
13	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
14	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	16	16	18	19	20
15	4	4	5	6	6	8	8	9	9	10	10	11	11	13	13	14	14	15	15	19
16	1	1	3	3	4	4	5	5	6	6	8	8	9	9	10	10	11	11	13	14

r - resistance

Change the resistance every segment (workout time/16)

A Note About Workouts With Predefined Segments: The level selected for a workout is used to dictate the Incline and/or Resistance per segment, in accordance with the table. The workout lasts for 16 segments of equal temporal length. The segment time is determined by dividing the number of segments by the workout time.

Example: If the user selects a workout length of 30 minutes, each segment lasts 1 minute and 52.5 seconds. (30 min / 16 = 1.875 min). If the user selects a Fat Burn workout level of 7, the incline increases from 2.0 to 5.0 after 5 minutes and 37.5 seconds.

If the user adjusts the time of the workout, during the workout, the new remaining length of the workout is evenly distributed across the remaining segments including the current segment. In the event of a reduction in workout time if the new segment length is less than the elapsed time in the current segment then the current segment will end and the next segment will start with the new distributed length.

Example: If the user started a 30 minute workout and in the 6th segment adds 5 minutes then segments 6-16 get 27.3 seconds added to their lengths. (5 min /11 = .45 min).

Workout – Fat Burn Climbmill

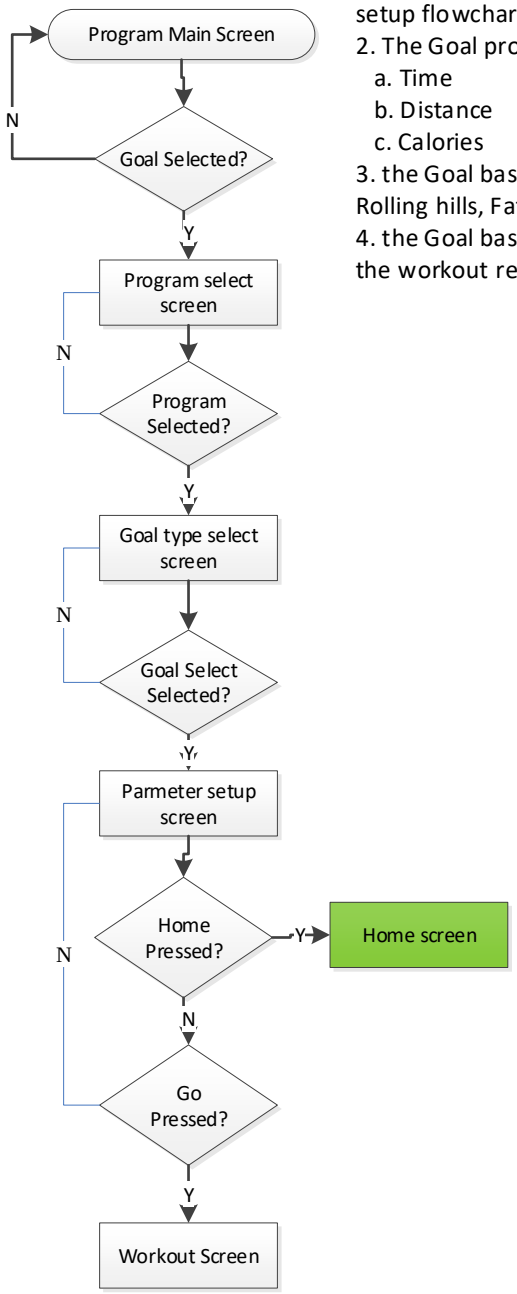
Level / Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance	resistance
1	1	2	3	5	6	7	8	8	9	9	12	12	14	14	15	16	16	17	17	18
2	3	5	7	9	9	10	12	13	14	15	15	16	17	18	19	20	21	22	23	26
3	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
4	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
5	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
6	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
7	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
8	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
9	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
10	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
11	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
12	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
13	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
14	6	8	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	28	30
15	3	5	7	9	9	12	12	14	14	15	15	17	17	20	20	21	21	23	23	29
16	1	2	3	5	6	6	8	8	9	9	12	12	14	14	15	15	17	17	20	21

Workout – Glutes (Ascent Only)

Segment	N/A	
	elevation	resistance
1	50	Min (0)
2	65	Min (0)
3	100	Max (1)
4	100	Max (1)
5	85	Min (0)
6	100	Max (1)
7	85	Min (0)
8	100	Max (1)
9	85	Min (0)
10	100	Max (1)
11	85	Min (0)
12	100	Max (1)
13	85	Min (0)
14	100	Max (1)
15	85	Min (0)
16	100	Max (1)
17	85	Min (0)
18	65	Min (0)
19	50	Min (0)

Min = Minimum resistance set by the user.
Max = Maximum resistance set by the user.
Change the incline & resistance every segment (workout time/19)
(Yes, Glutes has 19 segments)

Workout – Goal

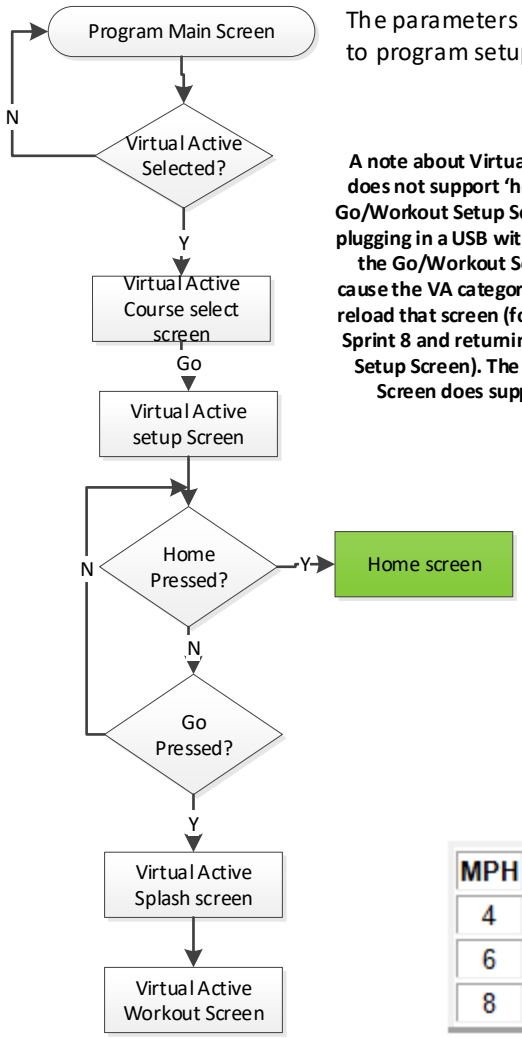


1. The parameters setup please refer to program setup flowchart
2. The Goal program have 3 different Goal:
   a. Time
   b. Distance
   c. Calories
3. the Goal based program can be used Manual, Rolling hills, Fat burn, Virtual active and THR
4. the Goal based program will be finished when the workout reach the Goal setup.

Program Main Screen

Goal Type Select Screen

Workout – Virtual Active



The parameters setup please refer to program setup flowchart

A note about Virtual Active: The console does not support 'hot plugging' from the Go/Workout Setup Screen. This means that plugging in a USB with VA content when on the Go/Workout Setup Screen will not cause the VA category to appear, you must reload that screen (for instance by opening Sprint 8 and returning to the Go/Workout Setup Screen). The Virtual Active Setup Screen does support hot plugging.

MPH	FPS	Formula
4	20	66%
6	30	100%
8	40	133%

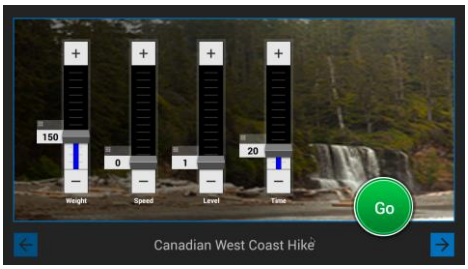
.All treadmill have to match the following table and formula ,

.the others like EP/BIKE… /can have different max and min speed configuration that match the info file in each film ,but same film must have same min/max speed config on all models include consumer , commercial and passport ,maybe other staff in the future .All these pre-configuration were from the VA team ,it could be configured externally and our system could be flexible on EP ,Bike and other equipments ,all config must be same as Matrix VA has

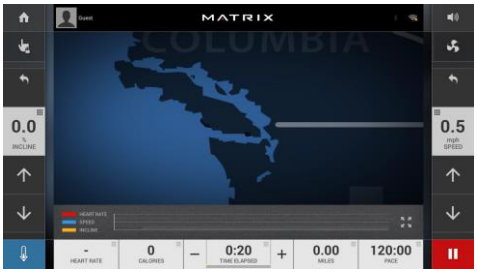
Program Main Screen

Virtual Active Select Screen

Virtual Active Setup Screen (includes course select)



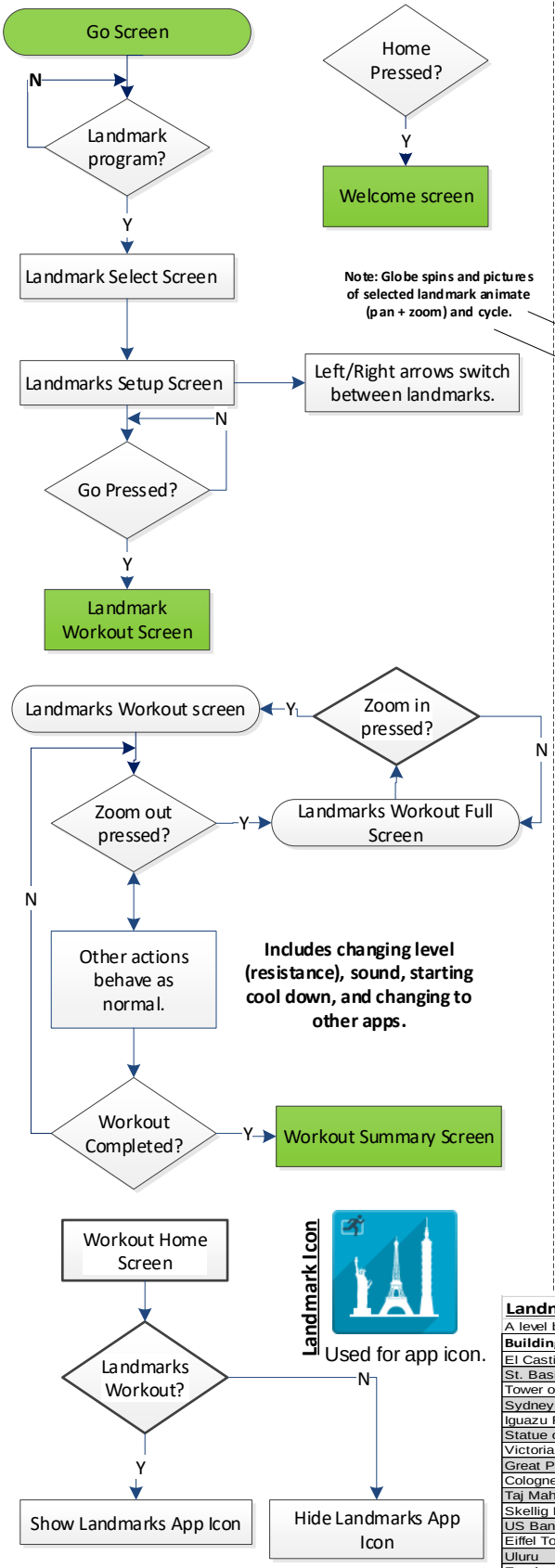
Virtual Active Splash Animation



Virtual Active Workout Screen

%Playback	Speed	RPM
66%	0.5 ~ 4.0 mph	0~40 rpm
Calculated	4.0 ~ 8.0 mph	40 ~ 120 rpm
133%	> 8.0 mph	> 120 rpm
Formula	MinVideoRate = 66% MaxSpeed = 8.0 mph MinSpeed = 4.0 mph if [CurrentSpeed < 8.0 & CurrentSpeed > 4.0] CurrentVideoRate = [[CurrentSpeed - MinSpeed]/[MaxSpeed - MinSpeed]] + MinVideoRate	MinVideoRate = 66% MaxRPM = 120 MinRPM = 40 if [CurrentRPM < 120 & CurrentRPM CurrentVideoRate = [[CurrentRPM - I - MinRPM]] + MinVideoRate

Workout – Landmarks (for Climbmill, replaces Sprint 8)



Depending on the workout goal either elevation or floors is displayed.

Landmarks Revised 3-16-18

A level based workout that automatically adjusts the resistance at regular intervals.

Building Name	Location	Height (m)	Height (ft)	Steps	Floors	Workout Goal
El Castillo	Yucatan, Mexico	30	98	210	10	Floors
St. Basil's Cathedral	Moscow, Russia	48	157	336	15	Floors
Tower of Pisa	Pisa, Italy	56	184	392	18	Floors
Sydney Opera House	Sydney, Australia	65	213	455	21	Floors
Iguazu Falls	Prana, Brazil / Misiones, Argentina	82	269	573	26	Floors
Statue of Liberty	New York City, USA	93	305	650	30	Floors
Victoria Falls	Livingstone, Zambia / Victoria Falls, Zimbabwe	108	354	755	34	Floors
Great Pyramid of Giza	Giza, Egypt	139	456	972	44	Floors
Cologne Cathedral	Cologne, Germany	157	515	1098	50	Floors
Taj Mahal	Agra, India	171	561	1196	54	Floors
Skellig Michael	County Kerry, Ireland	218	715	1524	69	Floors
US Bank Tower	Los Angeles, USA	310	1017	2168	99	Floors
Eiffel Tower	Paris, France	324	1063	2266	103	Floors
Uluru	Northern Territory, Austrailia	348	1142	2434	111	Floors
Empire State Building	New York City, USA	381	1250	2664	121	Floors
Rock of Gibraltar	Iberian Peninsula, Spain	426	1398	2979	135	Floors
CN Tower	Toronto Canada	457	1499	3196	145	Floors
Taipei 101	Taipei, Taiwan	509	1670	3559	162	Floors
One World Trade Center	New York City, USA	541	1775	3783	172	Floors
Christ the Reemer Statue	Rio de Janeiro, Brazil	734	2408	5133	233	Floors
Burj Khalifa	Dubai, United Arab Emirates	828	2717	5790	263	Floors

Note: This workout now has a system default cool down like any other Goal Based workout. See Workout – Default Behaviors for more information.

Also, Landmarks workouts are exempt from the Maximum Workout Floors setting. Users cannot increase or decrease the floors of a landmark, but if a landmark exceeds the maximum floors set for a goal work it does not end prematurely.

The bottom step of climb mill will need to be positioned at the step-on position when workout paused, stopped or completed.

Protocol

1 – Warm Up
- a – Warm up is 2 minutes. The user cannot change this length.
- b – Incline and resistance start at the machine minimum (Ex: 0%, 1) and remain there unless the user changes them.
  - i - Incline and resistance can only be changed using physical buttons, no onscreen controls are available.
- c - Users can adjust the target watts (up/down arrows will +/- 5 watts). Range is 15 - 525 watts.
- d - Note: user cannot skip the warm up.

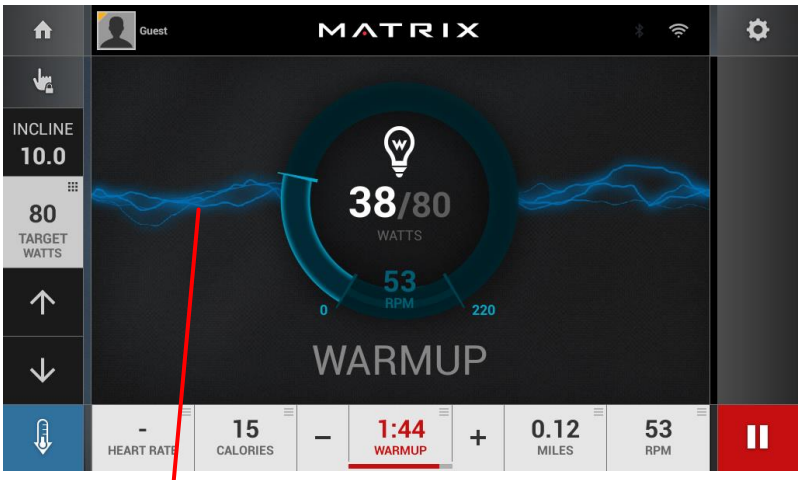
2 – Workout
- a – The user can adjust the length of the workout portion or enter Cool Down at any point. Cool Down will also be entered automatically at the end of the workout segment.
- b – Incline and resistance settings carry over from Warm Up and the user can continue to change them, but only using physical buttons.
  - i - Note: Although the user can change resistance the program will also be changing the resistance according to the logic below.
- c - Users can adjust the target watts at any time (up/down arrows will +/- 5 watts). Range is 15 - 525 watts.
- d - The console will check the current watts being output by the user every 2 seconds and adjust the resistance based on the accompanying chart.
  - i – Max and Min resistance are dependent on the frame.
  - ii - The user's watts output is determined by the frame's watts table.

3 – Cool Down
- a – Default Cool Down length is set in the system configuration. The user can adjust the length of the Cool Down up to the maximum adjustment (also set in the system configuration).
- b – Parameters during Cool Down are set to the following initially, but the user can adjust them using the physical buttons:
  - i – Incline = 0.
  - ii – Resistance = 1.
  - iii - Watts is also shown and can be changed, but this is only for display purposes, the console no longer adjusts the resistance to be within range of the watts.

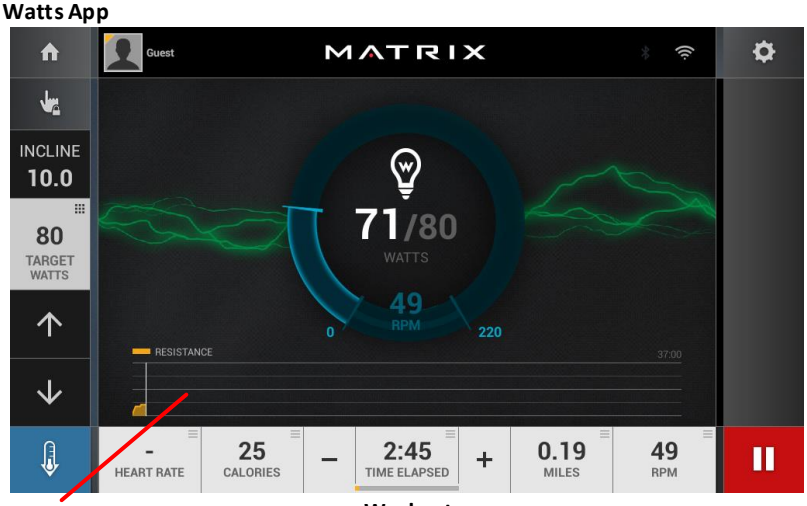
Watts and Resistance Adjustment Table

Target Watts - 50 Watts >= Current Watts	Increase Resistance by 3 up to Max Resistance.
Target Watts - 50 Watts < Current Watts <= Target Watts - 30 Watts	Increase Resistance by 2 up to Max Resistance.
Target Watts - 30 Watts < Current Watts <= Target Watts - 10 Watts	Increase Resistance by 1 up to Max Resistance.
Target Watts - 10 Watts < Current Watts < Target Watts + 10 Watts	Don't change Resistance.
Target Watts + 10 Watts <= Current Watts < Target Watts + 30 Watts	Decrease Resistance by 1 down to Min Resistance.
Target Watts + 30 Watts <= Current Watts < Target Watts + 50 Watts	Decrease Resistance by 2 down to Min Resistance.
Target Watts + 50 Watts <= Current Watts	Decrease Resistance by 3 down to Min Resistance.

Constant Watts App



Warm Up



Workout

Graph resistance only during the workout segment, displays whole graph during Cool Down. Range is 0 – Machine Max.

Lightning will change color depending on the difference between current watts and target watts. The colors are light blue, blue, green, orange and red. They follow the colors and ranges shown in the Watts and Resistance Table Above.

Constant Watts App Icon

Note: On certain Ascent/Lower Body Ascent frames there are no physical keys to adjust incline. For these frames the user will not be able to adjust incline during the workout.

Workout – Target Heart Rate I

Protocol

1 – At all times
- a – Heart rate is measured and averaged every second. But only checked every 5, 10 or 20 seconds depending on the program Measurement Time Window (see below).
- b – If no heart rate is detected for 60 seconds the following occurs:
  - i – The incline remains the same.
  - ii – The speed shall decrease until the machine minimum speed is reached per EN957-6 2010 (The rate of decrease shall be at least 1 km/h every 20s.).
    - 1 – Every 10 seconds the speed decreases by 1km/h until the machine minimum is reached at which point the speed remains at the minimum.
  - iii – The resistance shall decrease until the machine minimum is reached per EN957.
    - 1 – Every 10 seconds the resistance decreases by 1 until the machine minimum is reached at which point the resistance remains at the minimum.
  - iv – The user is notified that a heart rate is required for the workout and they need to use a heart rate strap or grab the heart rate hand grips.
    - 1 – Once a heart rate is detected the message is removed and the no-heart-rate counter is reset.
- c – If the heart rate exceeds the max heart rate the workout will end.
  - i – Max Heart Rate = 220 - User's Age
  - ii – Speed decelerates at 1 mph/second to 0. Incline returns to 0. Resistance is set to 1.
- d – The user can adjust the incline, resistance and speed at any time (Warm Up, Workout, Cool Down). During the workout portion the program will update per the chart based on the current speed, incline, or resistance whether the value has been calculated by the program or changed by the user.
  - i – Example: If the user's heart rate is 20 BPM below the Target Heart Rate and the user changes from 2% to 10% incline, the program will next change the incline to 10.5%, not 2.5%.
  - ii – Note that if the program changes the parameter it is bounded by the machine minimum (default is 0.5 MPH, 0%, 1) and the maximum set by the user prior to the workout. This means that if the user increases the parameter above the maximum and the program then adjusts it, even if it tries to increase the parameter, it will be reduced to the maximum set by the user prior to the workout.
    - 1 – Example: If the user's heart rate is 20 BPM below the Target Heart Rate and the user changes from 5 to 15 resistance, but set the program maximum to 12 resistance. The program will next change the resistance to 12, not 16.

2 – Warm Up
- a – Warm up is 2 minutes. The user cannot change this length.
- b – Speed, incline and resistance start at the machine minimum (Ex: 0.5 MPH, 0%, 1) and remain there unless the user changes them.
- c - Note: you cannot skip the warm up, this includes Treadmill as there is no sole 'Go' button.

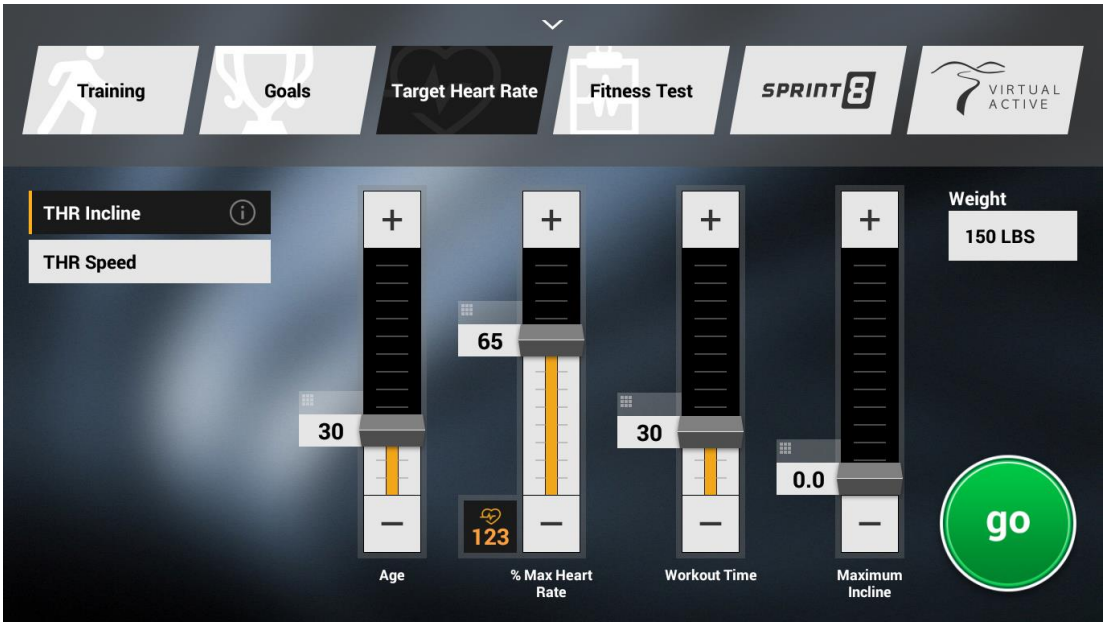
3 – Workout
- a – The user can adjust the length of the workout portion or enter Cool Down at any point.
- b – The workout adjusts parameters based on the accompanying chart and what Target Heart Rate program has been selected (Speed, Incline, Resistance).
  - i – For each parameter the table lists:
    - 1 – The BPM range above/below the target heart rate that causes the parameter to change.
    - 2 – The amount the parameter is adjusted by.
    - 3 – How often the heart rate is checked and the parameter is adjusted. Note that when the heart rate is checked it is an average that resets every time it is checked.
- c – Target Heart Rate = (220 - User's Age) * THR Goal %

4 – Cool Down
- a – Default Cool Down length is set in the system configuration. The user can adjust the length of the Cool Down up to the maximum adjustment (also set in the system configuration).
- b – Parameters during Cool Down are set to the following:
  - i – Speed = 60% current speed or 4.0 MPH whichever is slower.
  - ii – Incline = 0.
  - iii – Resistance = 1.

Parameter	Frames	Measurement Time Window	Heart Rate Measuremement	Parameter Adjustment
Speed	Treadmill	20 Seconds	Heart Rate >= THR + 5	Speed = Speed - 0.5 km/h
			THR - 5 < Heart Rate < THR + 5	No Change
			Heart Rate <= THR - 5	Speed = Speed + 0.5 km/h
Incline	Treadmill	5 Seconds	Heart Rate >= THR + 5	Incline = Incline - 0.5%
			THR - 5 < Heart Rate < THR + 5	No Change
			Heart Rate <= THR - 5	Incline = Incline + 0.5%
Resistance	Bike (UR)	10 Seconds	Heart Rate >= THR + 5	Resistance = Resistance - 1
	Ascent (A, LBA)		THR - 5 < Heart Rate < THR + 5	No Change
	Elliptical		Heart Rate <= THR - 5	Resistance = Resistance + 1
	Climbmill			

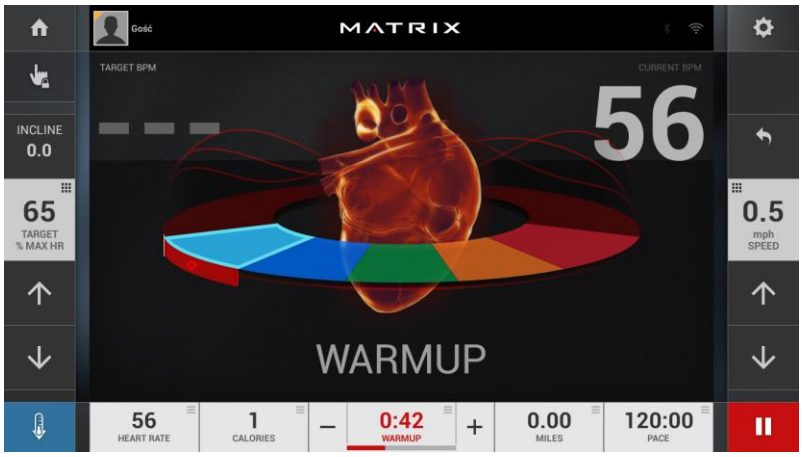
Frame	Inputs				
Treadmill	Age	% Max Heart Rate (Target Heart Rate)	Workout Time	Max Incline	Weight
	Age	% Max Heart Rate (Target Heart Rate)	Workout Time	Max Speed	Weight
Bike (UR)	Age	% Max Heart Rate (Target Heart Rate)	Workout Time	Max Resistance	Weight
Elliptical	Age	% Max Heart Rate (Target Heart Rate)	Workout Time	Max Resistance	Weight
Ascent (A, LBA)	Age	% Max Heart Rate (Target Heart Rate)	Workout Time	Max Resistance	Weight
Climbmill	Age	% Max Heart Rate (Target Heart Rate)	Workout Time	Max Resistance	Weight

Workout – Target Heart Rate II



Example Go Screen: Treadmill

Target Heart Rate App



Warm Up

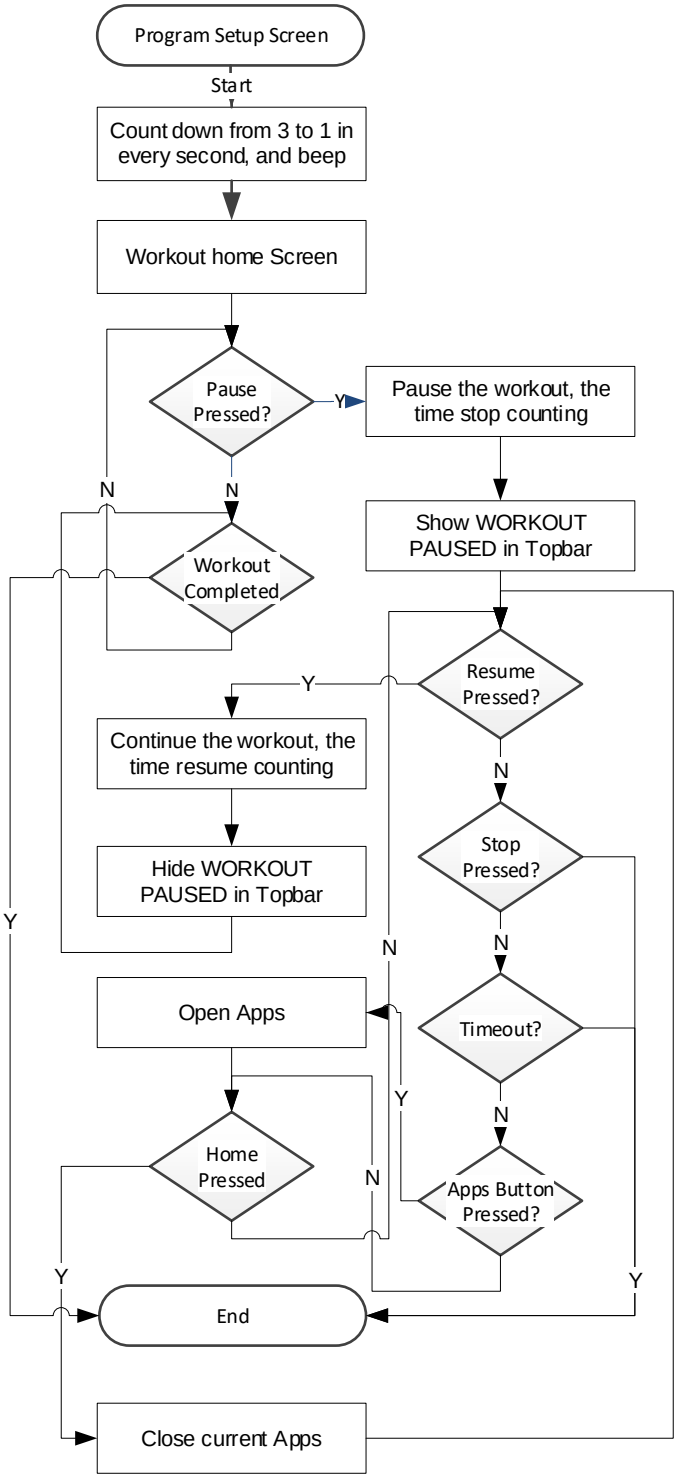
Workout

Note: Sidebar will let the user change % Max Heart Rate (or % MAX HR). Range is 50% - 90% of max heart rate. App will show Current BPM and new Target BPM (this should be calculated from the new % and the user's max heart rate). During Warm Up no target BPM displays, just '--'.

Target Heart Rate App Icon

Note: On certain Ascent/Lower Body Ascent frames there are no physical keys to adjust incline. For these frames the user will not be able to adjust incline during the workout.

Workout – Manual Pause

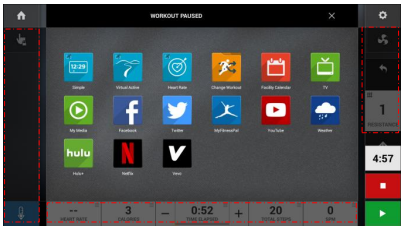


Workout Paused Screen

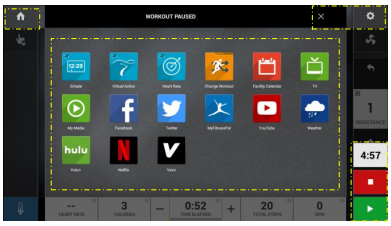
NOTE

1. Workout unrelated apps are still available during workout paused

2. It is only shows Workout Paused when paused by manual

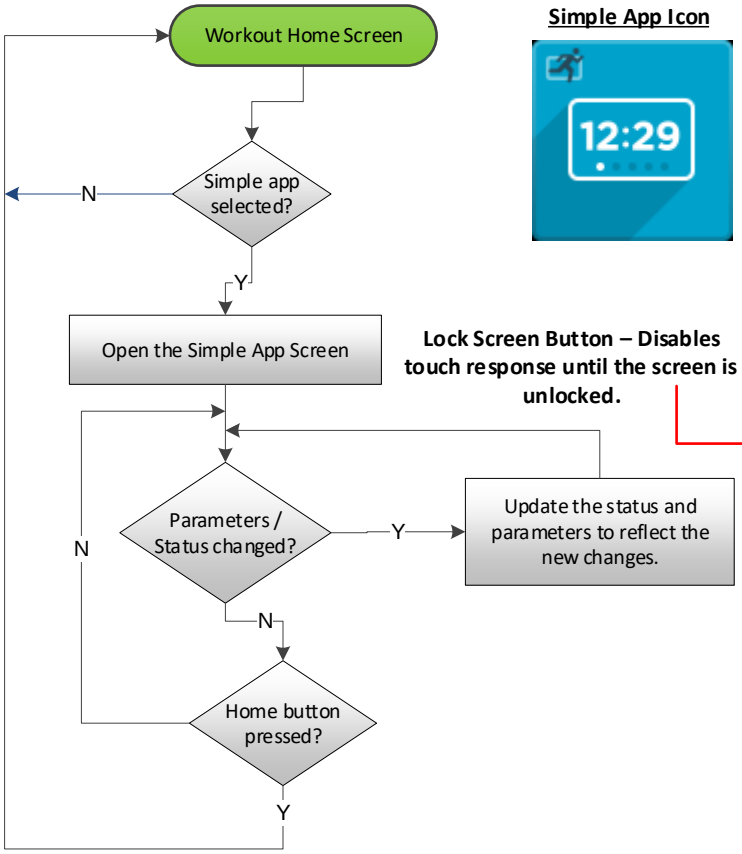


Function disabled area



Function enabled area

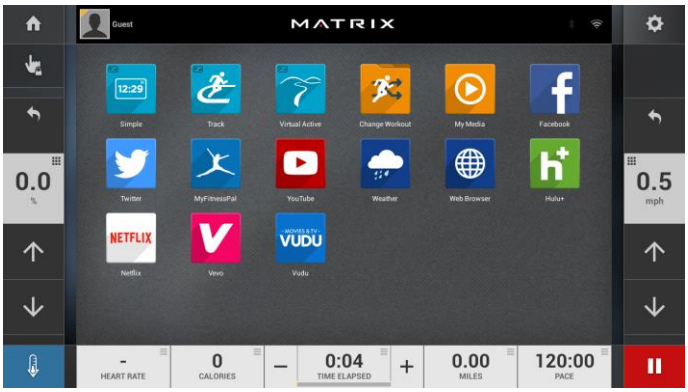
App – Simple



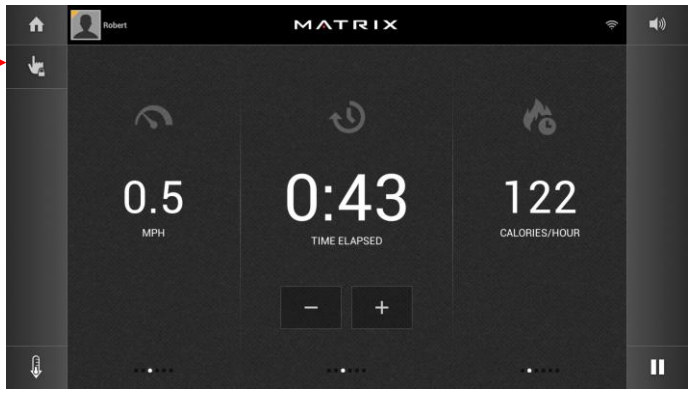
Simple App Icon

Lock Screen Button – Disables touch response until the screen is unlocked.

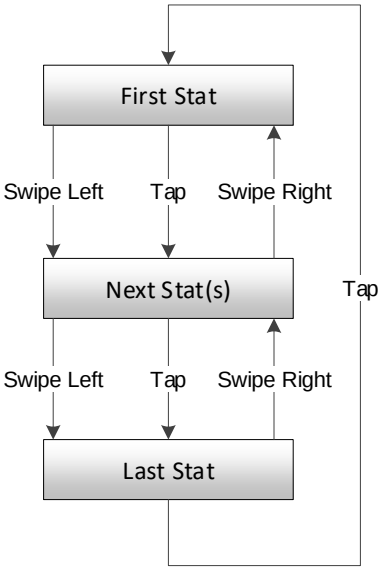
Workout Home Screen



Simple App Screen



Workout Summary Screen



Panel Behavior

In the Simple App you can swipe left or right which will include a sliding animation. When swiping if you get to the last or first stat in a panel, depending on how you were swiping, you stay on that stat if you continue swiping the same direction. You can also tap a panel which cycles stats the same as swiping left, but without the animation. If you reach the last stat of a panel and tap then the panel will cycle back to the first stat.

Stats Per Panel and Frame

Left Panel	
Stat	**Frames**
Distance (Imperial)	TUREA
Distance (Metric)	TUREA
Speed (Imperial)	TUREA
Speed (Metric)	TUREA
RPM	UREA
Incline	TA
Elevation	TC
Steps	C
Floors	C
SPM	C
Average SPM	C

Middle Panel	
Stat	**Frames**
Goal Remaining	TUREAC
Total Goal	TUREAC
Time Elapsed	TUREAC
Pace	TUREA
Average Pace	TUREA
Clock	TUREAC

Right Panel	
Stat	**Frames**
Calories	TUREAC
Calories Per Hour	TUREAC
Heart Rate	TUREAC
Peak Heart Rate	TUREAC
% Max Heart Rate	TUREAC
Watts	TUREAC
METS	TUREAC

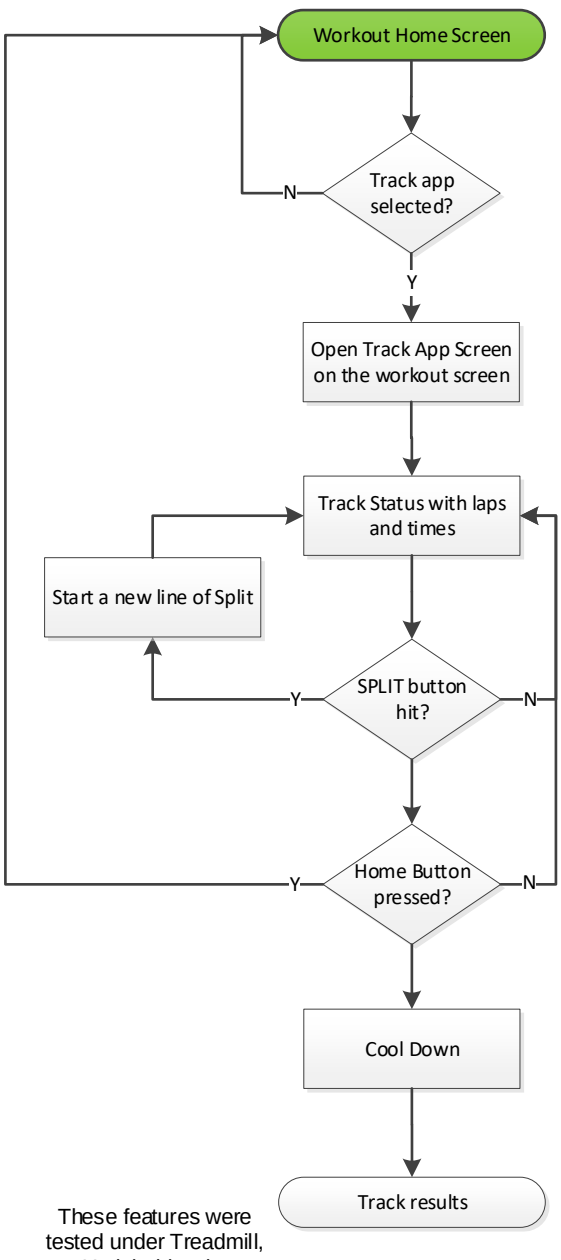
Watts will only appear on 50-Series machines.

Note:

1 - Goal depends on the workout and frame. It can be Time, Distance, Calories, Floors, or Elevation/ Height. Additionally, this column will indicate workout stage if applicable. Clock refers to the current time of day.

2 - % Max Heart Rate is only measured and displayed during a Target Heart Rate workout. This stat does not appear in the Simple App otherwise.

App – Track



These features were tested under Treadmill, Upright bicycle, Recumbent bicycle, and ascent

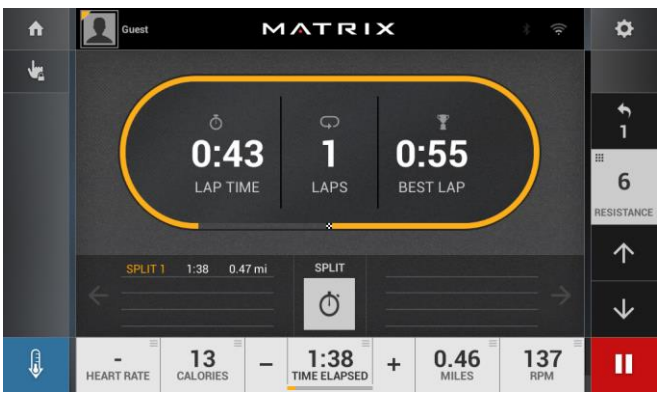
Workout Home Screen

Track App Screen

Warm Up

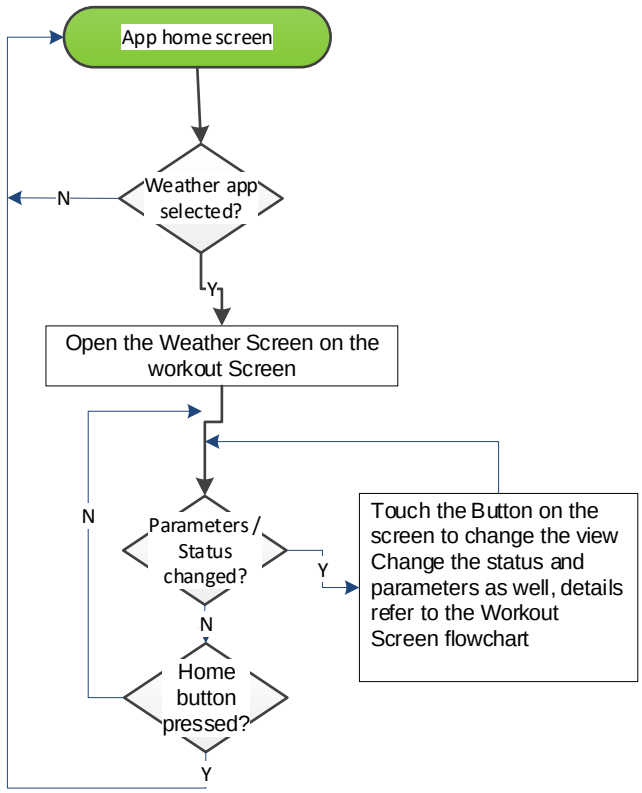
Mutliple Splits, Lap Completed Screen

Track App with bike



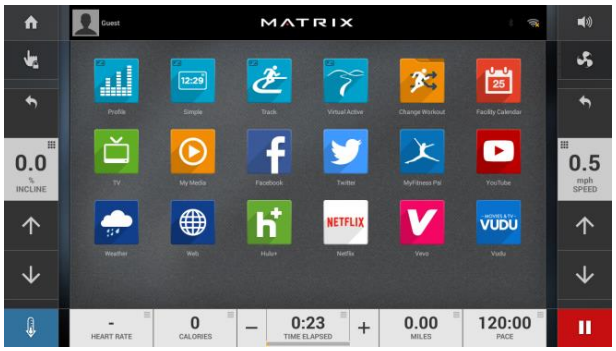
- **Warm Up**
- During Warm Up the splits menu is hidden.
- When the warm up is complete the track shifts up the current lap is reset.
- **Workout**
- **Track**
- The yellow/orange is the part of the track that the user has run for a current lap.
- The track is 400m or 0.25 miles around.
- The color fills in around the track counter-clockwise.
- When the color reaches the finish line the track resets and lap counter increments.
- When the Warm Up is complete the track resets and the current lap is thrown away. Any laps completed in warm up will count in the lap total and can be used for the best lap.
- When the workout is complete and cool down is entered the track resets and the current lap is thrown away.
- **Splits**
- The splits are independent of the laps. The first split starts when the workout starts.
- When the user presses the split button it ends the current split and starts a new one.
- On transition from Warm Up to Workout or Workout to Cool Down the split is automatically ended and the next split begins.
- In Cool Down no new splits can be made, but the user can view their previous splits.
- On transition to the next split if it is shown off screen (e.g., this is the 7th split) then the splits auto scroll so the current split is in the upper right hand slot.
- Arrows on either side of the split table will change color to indicate they can be pressed to display columns containing splits. Up to 99 splits.

App – Weather

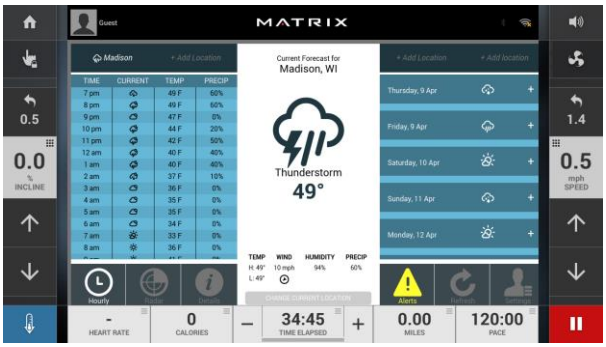


- The location set in settings as the default location is for the console and should be whatever the user sets as the location.
- This location is stored on the console and is stored as a Latitude and Longitude.
- This location is erased in a Factory Defaults restore.
- In the app itself this location is represented as the first stored location for logged in/saved users (who can save additional locations, local users would have to have that info saved on the console which it currently is not) and the only location for guests who can then add more locations though those are not saved.
- If no location is set then the location defaults to the location determined by IP address.
- The map should go to the lat/long if one is passed otherwise goes to the location determined by the IP address.

Apps home Screen

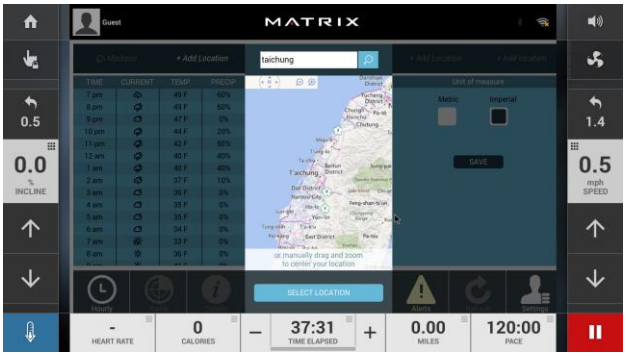


Weather Forecast + Current Screen

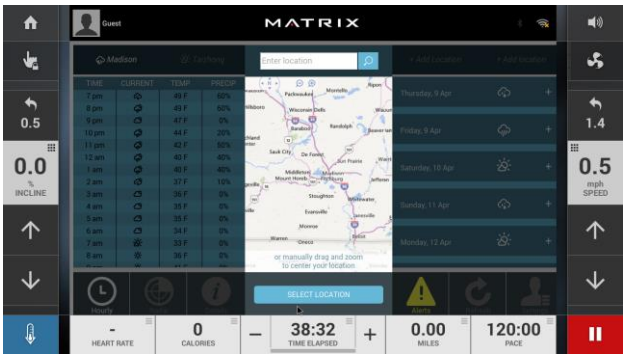


Weather Radar Screen

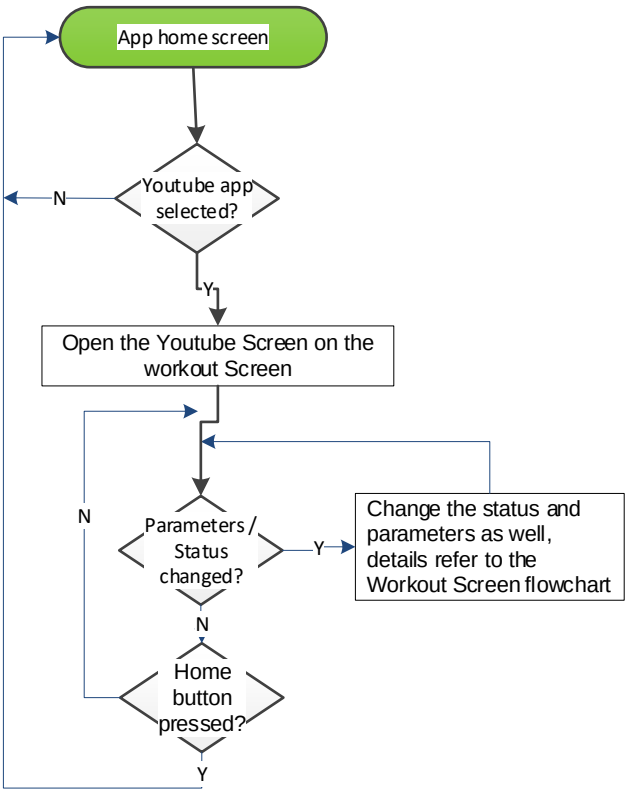
Add Location Screen



Change Location Screen

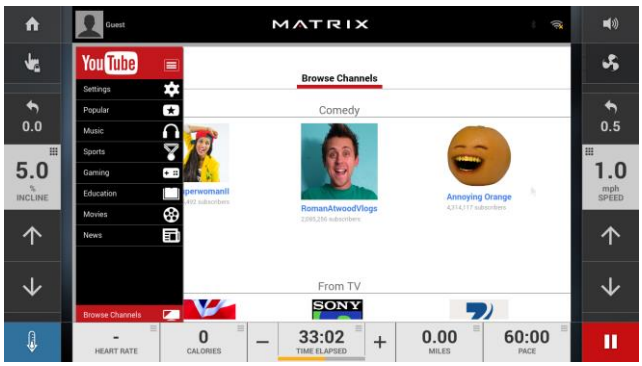


App – YouTube



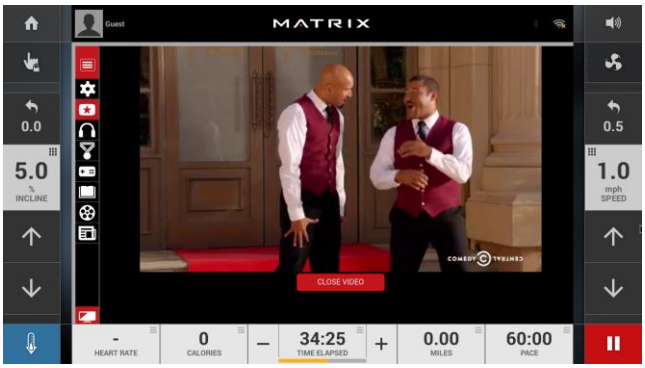
Apps home Screen

Youtube home Screen

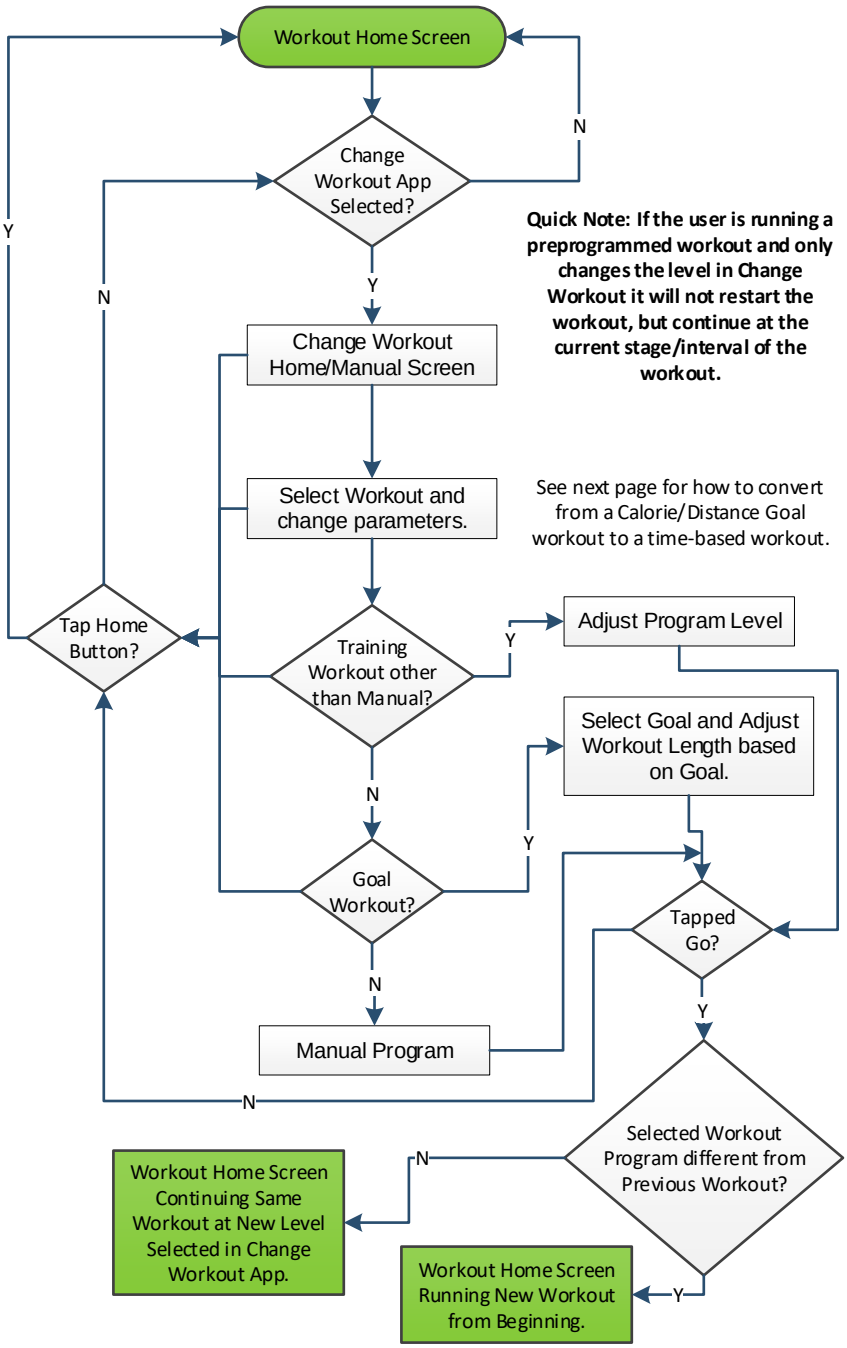


Youtube Screen (I)

Youtube Screen (II)



App – Change Workout I



Quick Note: If the user is running a preprogrammed workout and only changes the level in Change Workout it will not restart the workout, but continue at the current stage/interval of the workout.

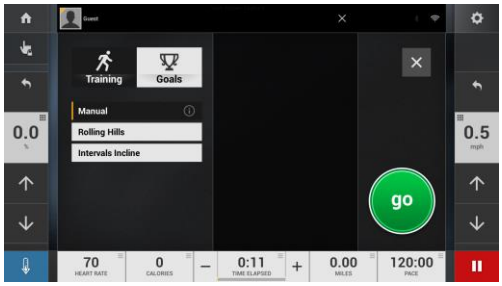
See next page for how to convert from a Calorie/Distance Goal workout to a time-based workout.

Workout	Can Change Out of?	Can Change Workout to?
THR(%) Incline	Yes	No
THR(%) Speed	Yes	No
THR(%) Resistance/Level	Yes	No
Training - Manual	Yes	Yes
Training - Fat Burn	Yes	Yes
Training - Rolling Hills	Yes	Yes
Training - Intervals (Incline)	Yes	Yes
Training - Intervals (Resistance/Level)	Yes	Yes
Training - Constant Watts	Yes	No
Training - Glutes	Yes	Yes
Goal - Time	Yes	Yes
Goal - Distance	Yes	Yes
Goal - Calorie	Yes	Yes
Goal - Floors	Yes	Yes
Fitness Test - Gerkin	No	No
Fitness Test - Cooper	No	No
Virtual Active	Yes	No
Sprint 8	No	No
Landmarks	No	No

Note: You also cannot change out of a workout if you are in Cool Down.

Workout Home Screen

Change Workout Home/Manual Screen



Change Workout Training Screen

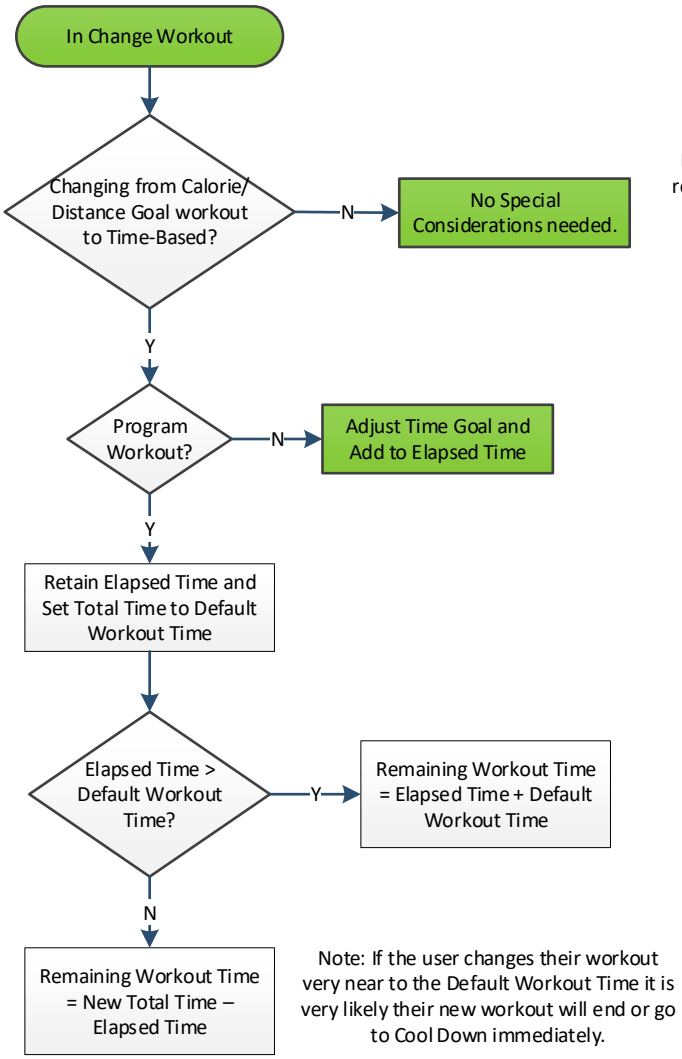
Change Workout Goal Screen

Change Workout Info Screen

Change Workout Icon

Information Icon: Tapping produces a popup with info about the selected workout.

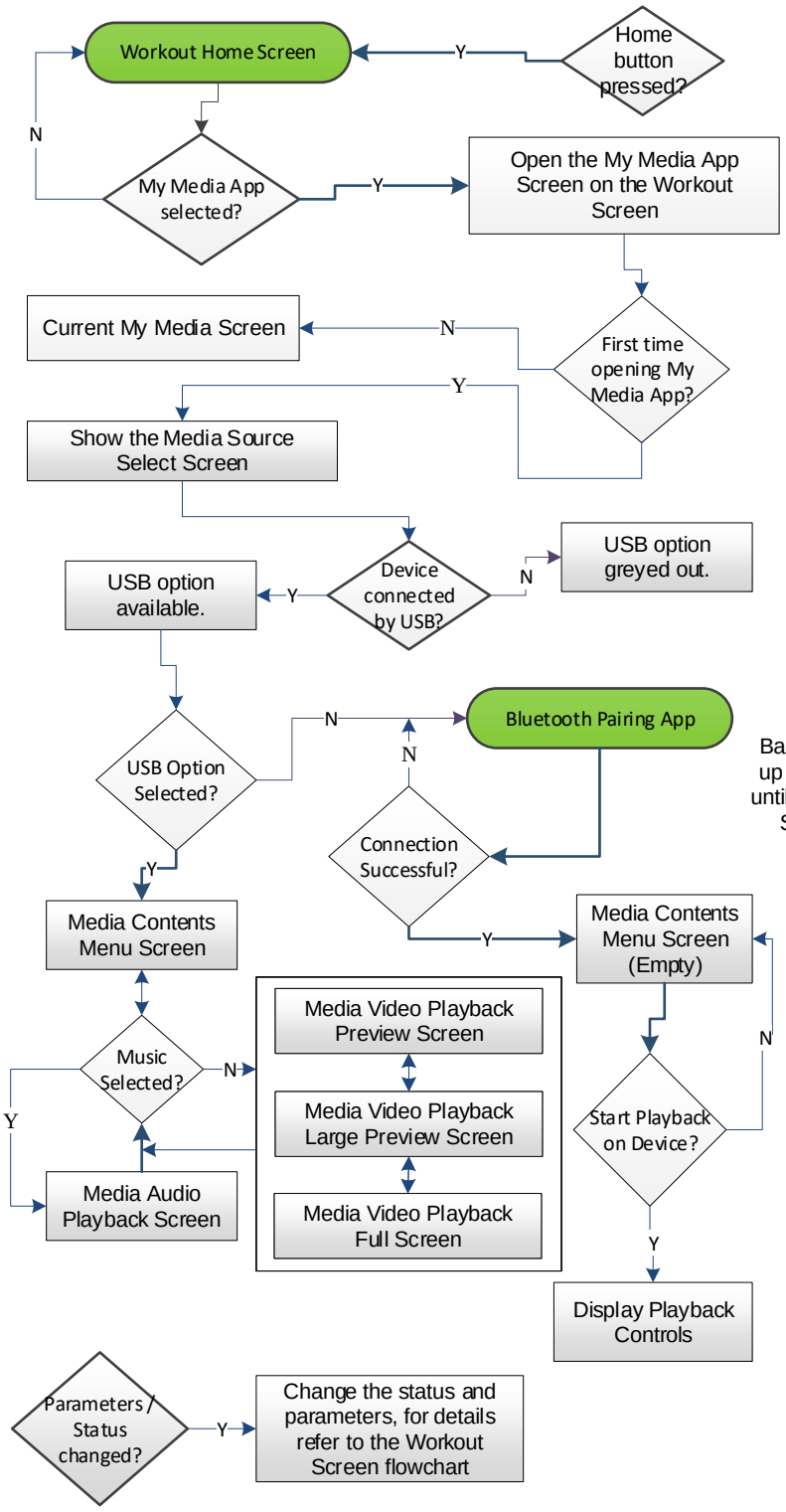
App – Change Workout II – Convert from Calorie/Distance Goal to Time-Based



E.g., if the goal is already time based we retain the time goal and currently elapsed time since the user can adjust the time from the bottom bar.

Note: If the user changes their workout very near to the Default Workout Time it is very likely their new workout will end or go to Cool Down immediately.

My Media App - I



Note: The software is able to support mass storage devices and most android devices (over MTP).

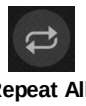
Play/Pause

Hold to Fast forward, tap for next track

Hold to rewind, tap for previous track

Repeat Playlist

Off


Repeat All

Repeat Current Song

Shuffle Playlist

Off

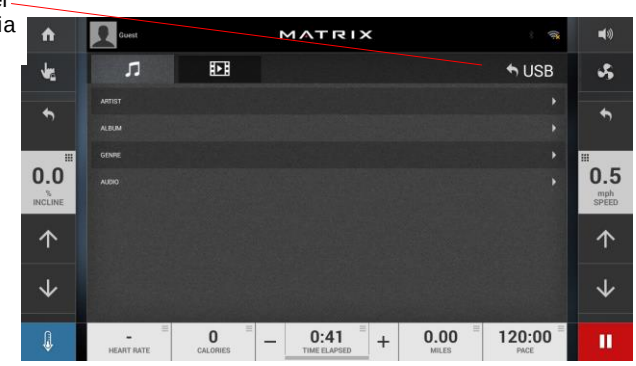
On

Workout Home Screen

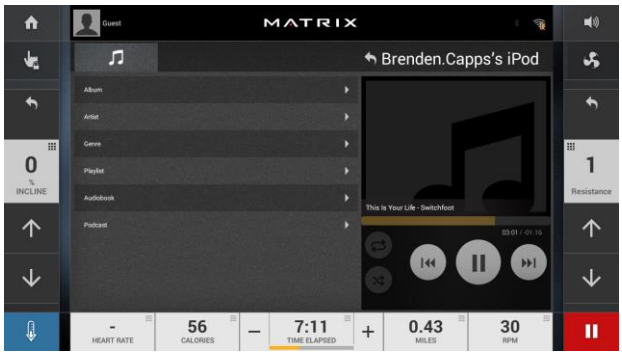
Media Source Select Screen

Back Button, goes up one menu level until reaching Media Source Select

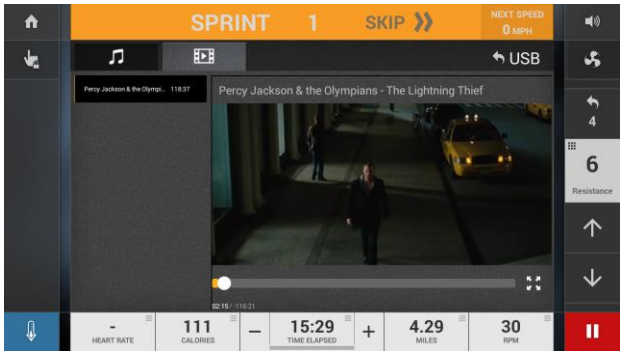
Media Contents Menu Screen



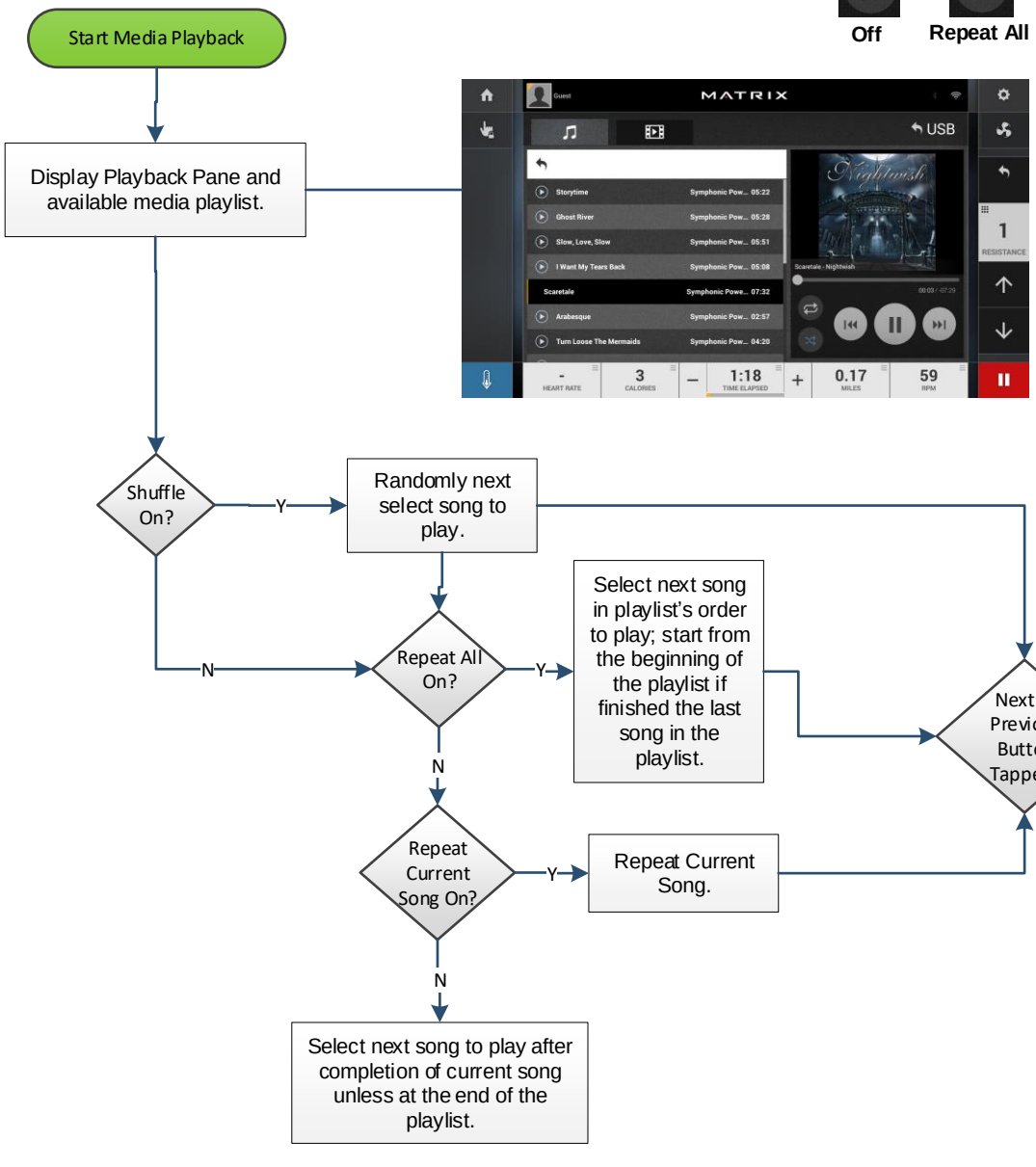
Media Audio Playback Screen



Media Video Playback Preview Screen



Media Playback Protocol



Repeat Playlist

Off **Repeat All** **Repeat Current Song**

Shuffle Playlist

Off **On**

Previous

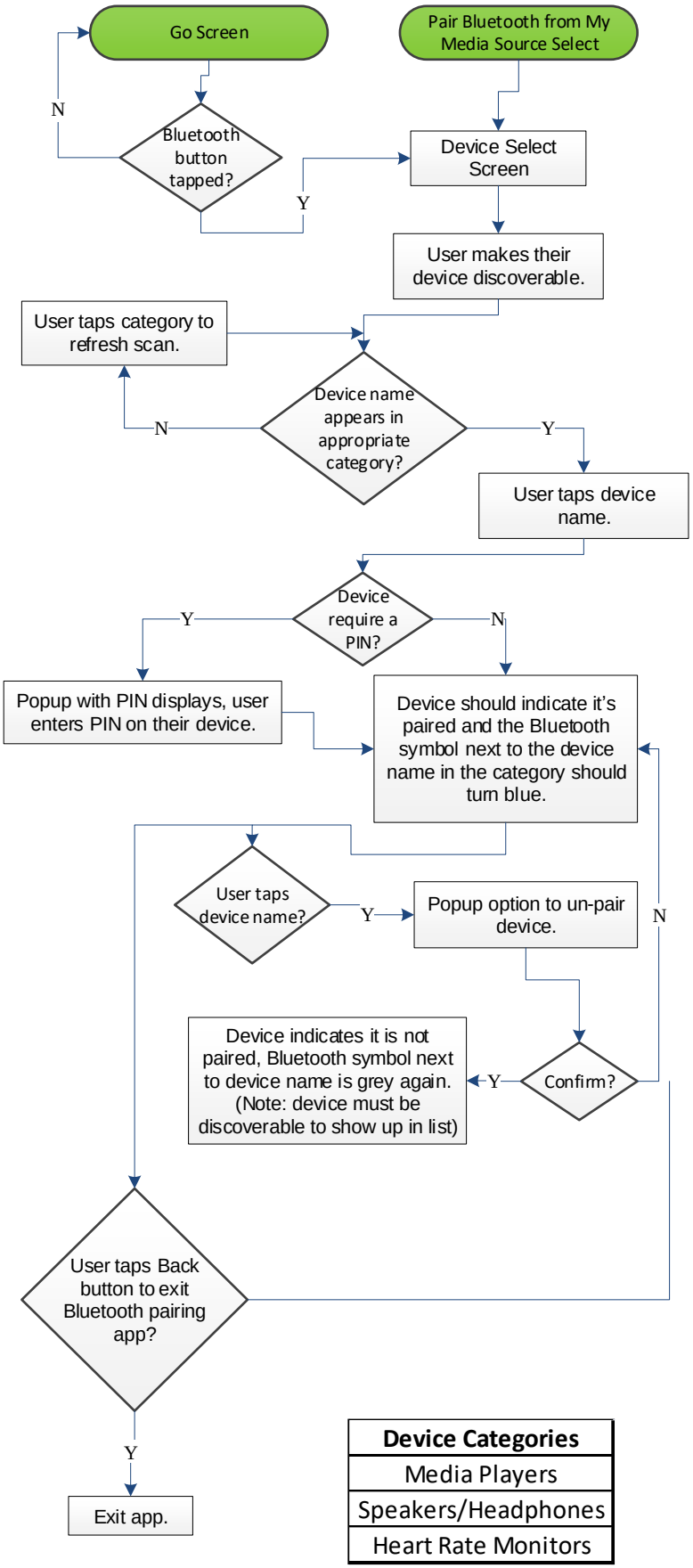
Next

Note: Shuffle shuffles all songs in a list. Repeat has repeat all and repeat one. With repeat one on the song repeats if it reaches the end, but if the user uses the next or previous button then a different song is selected depending on if shuffle is on/off.

<u>Important</u>

Do Not plug in an SD Card into the back of console (for Virtual Active for instance) while My Media is playing as this will break My Media. For those not aware this is also unsafe and liable to break hardware. The console should be off before adding/removing the SD Card.

Bluetooth Pairing App



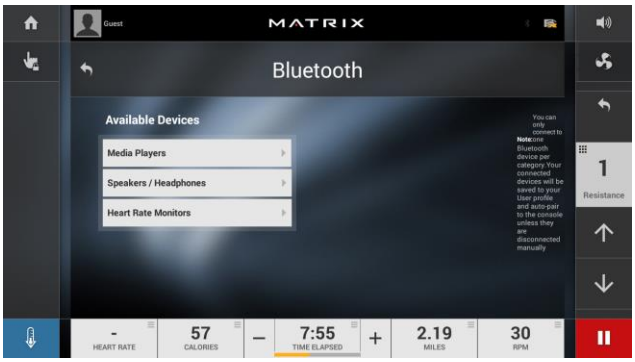
Device Categories
Media Players
Speakers/Headphones
Heart Rate Monitors

Go Screen

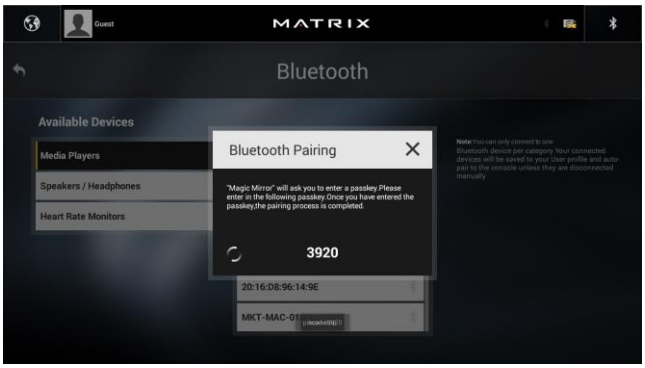
Back Button

Bluetooth Device Select Screen

Bluetooth App from My Media App

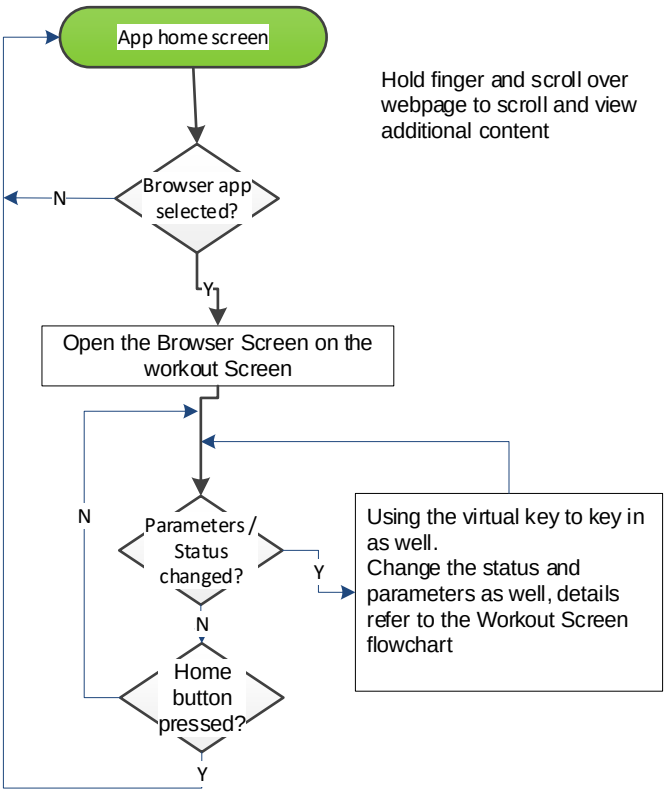


Pairing Screen



Unpair Screen

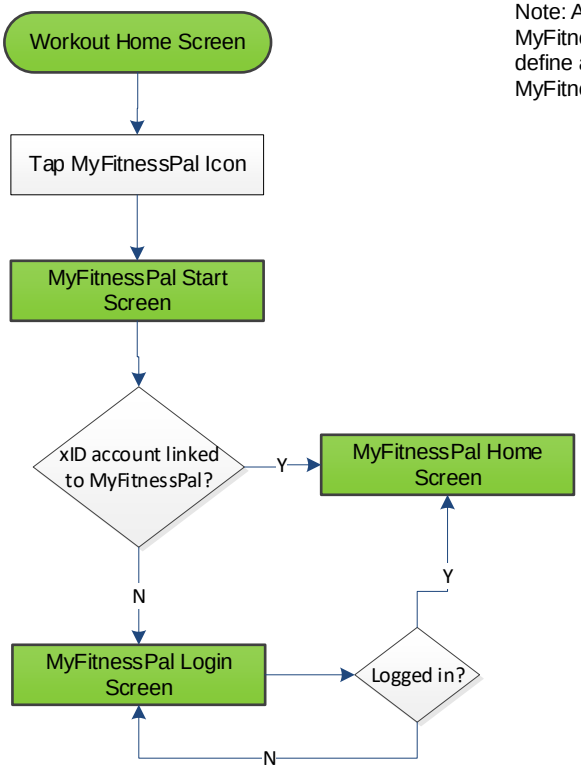
App – Web Browser



Apps home Screen

Browser Screen

App – MyFitnessPal

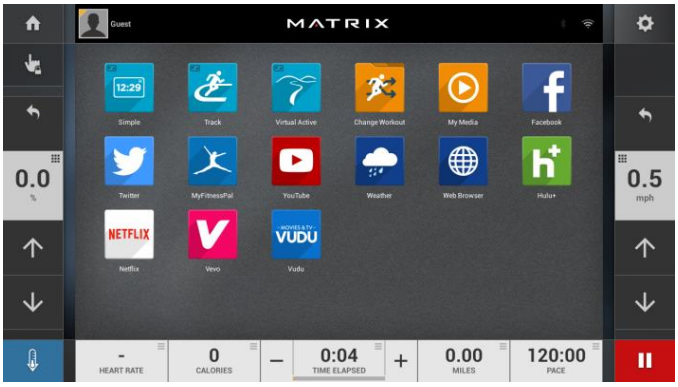


Note: All the features are from MyFitnessPal, Johnson didn't define any function on MyFitnessPal.

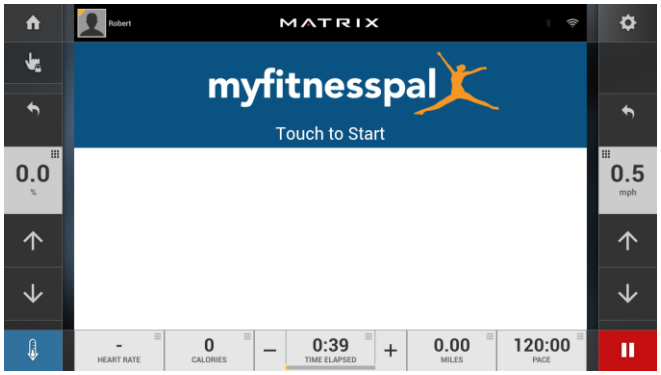
Features Available:
1 - Daily Nutrition Summary (Home Screen)
2 – Intake/Progress over the last 7/14/30 days of Calories, Carbs, Fat, Protein, Cardio and Weight (Progress Screen)

MyFitnessPal Icon

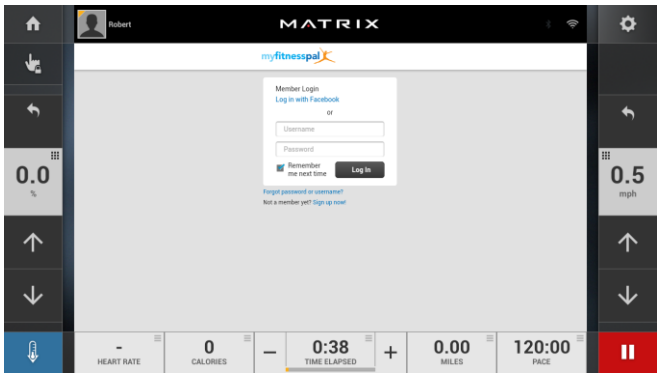
Workout Home Screen



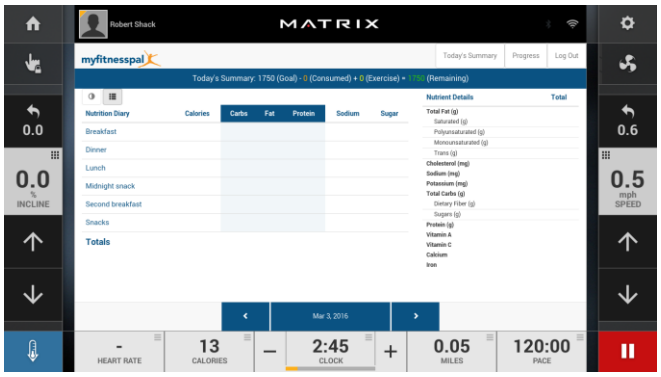
MyFitnessPal Start Screen



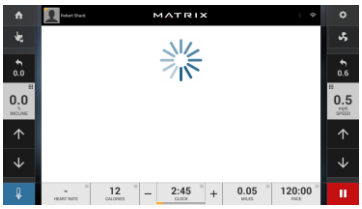
MyFitnessPal Login Screen



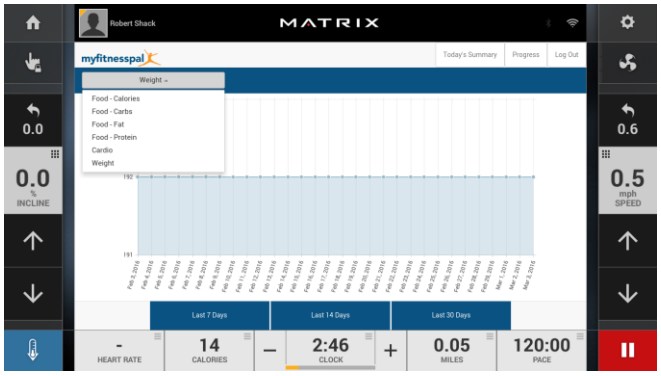
MyFitnessPal Home Screen



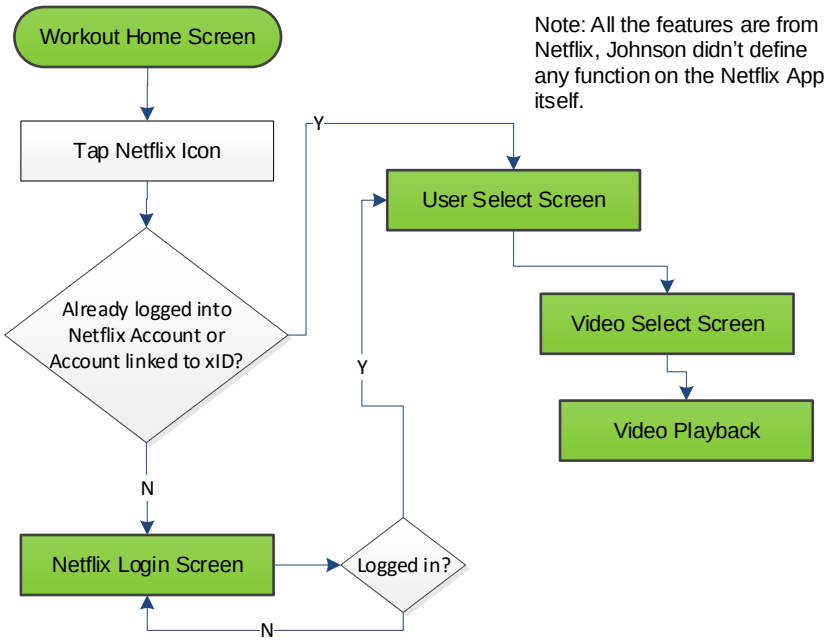
MyFitnessPal Loading Screens



MyFitnessPal Progress Screen



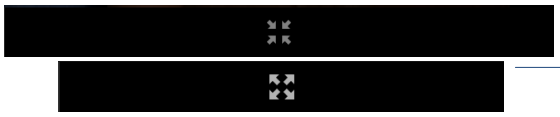
App – Netflix



Note: All the features are from Netflix, Johnson didn't define any function on the Netflix App itself.

Controls

Back – Android back button. Exit videos, menus, etc. back to user select or video select.



Expand/Contract – Go between full screen and windowed for the app.

Netflix Controls

Note: These controls are internal to the app and cannot be removed or hidden.

Netflix Full Screen Playback

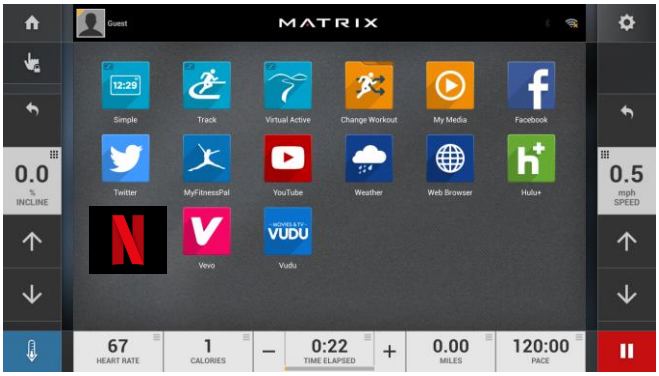
Without Controls

With Controls

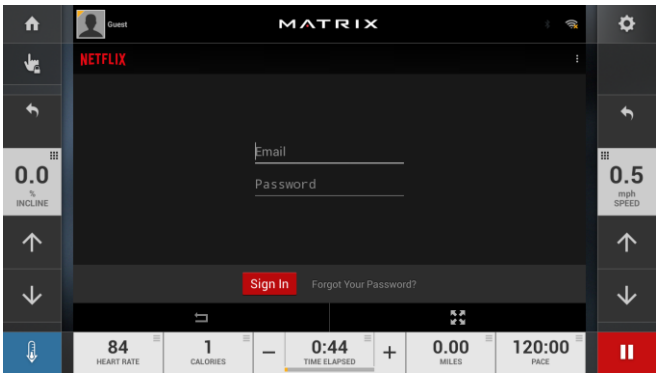
Netflix Windowed Playback Screen

Netflix Icon

Workout Home Screen



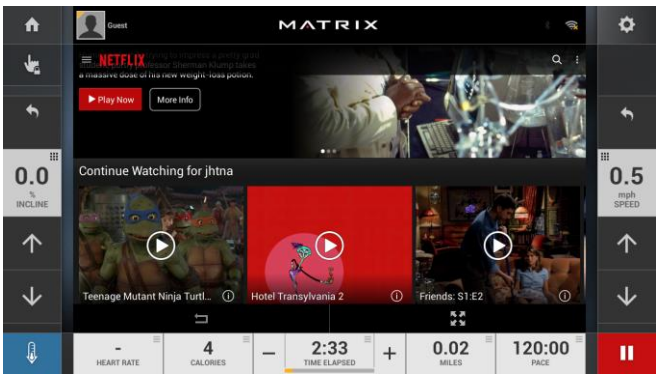
Netflix Login Screen



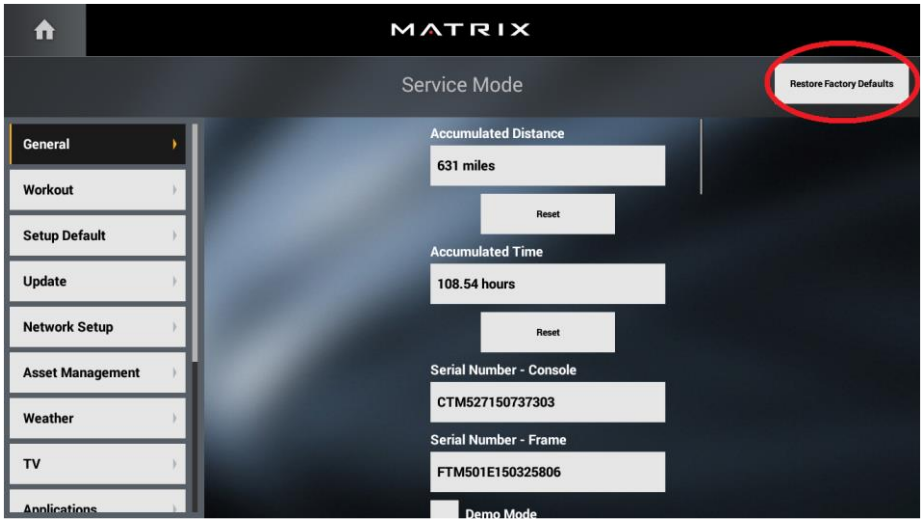
Netflix Loading Screen

Netflix User Select Screen

Netflix Video Select Screen



Factory Defaults



Restore Factory Defaults must be run whenever the console is placed on a new frame.

Found in Service and Engineering Modes. Resets the following options to preset values.

Option	Value
Frame	Treadmill
Accumulated Distance	Machine Default (0.00)
Accumulated Time	Machine Default (0.00)
Floors Climbed	Machine Default (0)
Console	Auto Detect if Possible
Frame ID	----------
Console ID	----------
Time Zone	(GMT-06:00) Central Time (US and Canada)
Accumulated Distance Since Belt Was Last Lubed (Lube Miles)	0
Hours Since Chain Was Last Lubed	0.00
Time Format	Service Mode Default (12hr)
Automatic Update	Check (true)
Language	English - United States
Keyboard Disable Threshold	Service Mode Default (2.0MPH)
Screen Timeout	Service Mode Default (120s)
Screen Brightness	Service Mode Default (100)
Show Setup Wizard (Launch First Time Setup)	Check (true)
Maximum Workout Time	Service Mode Default (120 min)
Maximum Workout Calories	Service Mode Default (1000)
Maximum Workout Distance	Service Mode Default (31mi/50km)
Maximum Workout Floors	Service Mode Default (150)
Maximum Level	Service Mode Default (25)
E-Stop Enable	Service Mode Default (Check)
Pause Time	Service Mode Default (5 min)
Maximum Speed	Service Mode Default (12.5mph/20.0km/h)
Start Speed	Machine Minimum
Maximum Incline	Service Mode Default (15%/100%)
Cool Down Time	Service Mode Default (5 min)
Maximum Cool Down Adjustment Time	Service Mode Default (5 min)
Level	Engineering Mode Default (1)
Age	Service Mode Default (30)
Weight	Service Mode Default (150lbs)
Applications	Service Mode Default (Show all available apps)
Gender	Service Mode Default (Male)
Default Workout Time	Service Mode Default (30 min)
Default Workout Calories	Service Mode Default (300)
Default Workout Distance	Service Mode Default (3.0mi/5.0km)
Default Workout Floors	Service Mode Default (20)
Energy Saver Timeout	Service Mode Default (30 min)
Backlight Brightness	Service Mode Default (100)
Play Key Sound	Service Mode Default (True)
Play Workout Countdown Sound	Service Mode Default (True)
Master Volume	Service Mode Default (5)
Enable Weather Alerts	Service Mode Default (True)
DAPI Environment	Service Mode Default (Production)
User Profiles	Delete All User Profiles
Wifi Setup	Delete Saved Networks
Default Web page	Engineering Mode Default (http://www.matrixfitness.com)

After a restore the machine needs to run First Time Setup again.

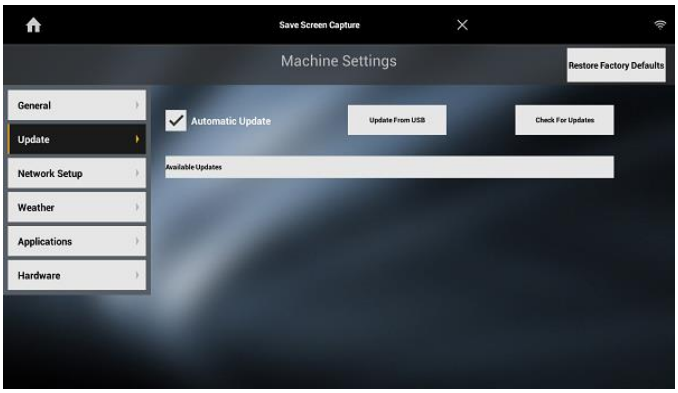
As noted, Restore to Factory Defaults deletes all user profiles on the console. After the restore users will have to make a new profile or re-login and associate their Viafit profiles with the console again.

Machine Settings

General (I)

General (II)

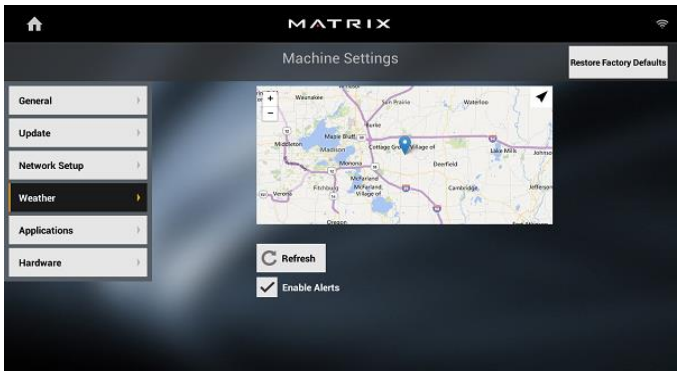
Update



Network Setup (I)

Network Setup (II)

Weather



Applications

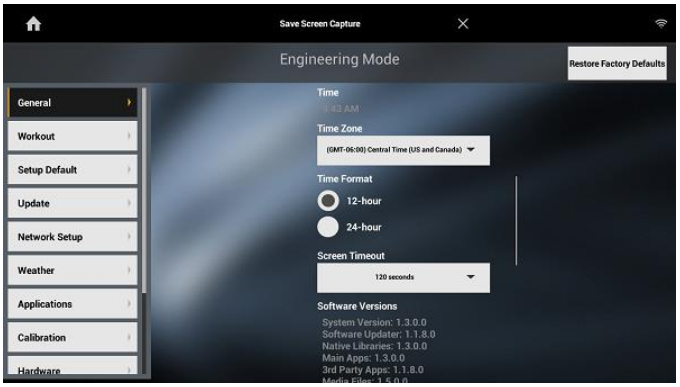
Hardware

Engineering Mode I

Engineering General Setting Screen (I)

Engineering Defaults Setup Screen (I)

Engineering General Setting Screen (II)

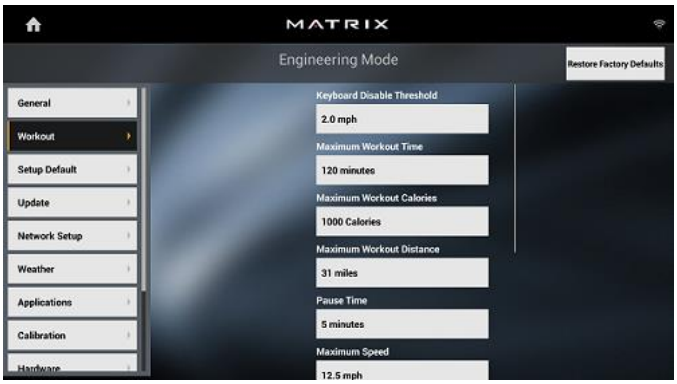


Engineering Defaults Setup Screen (II)

Engineering General Setting Screen (III)

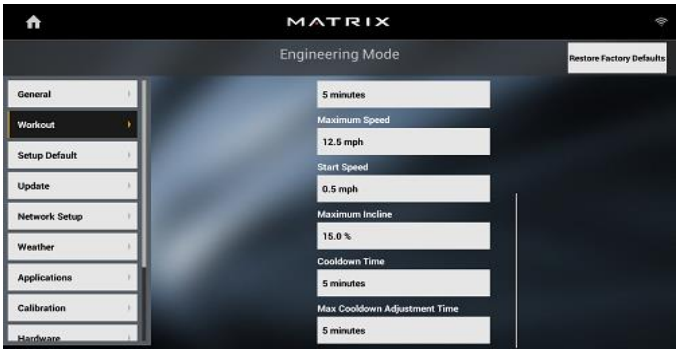
Engineering Update Screen

Engineering Workout Setting Screen (I)



Engineering Network Setup (I)

Engineering Workout Setting Screen (II)



Engineering Network Setup (II)

Engineering Mode II

Engineering Weather

Engineering Service

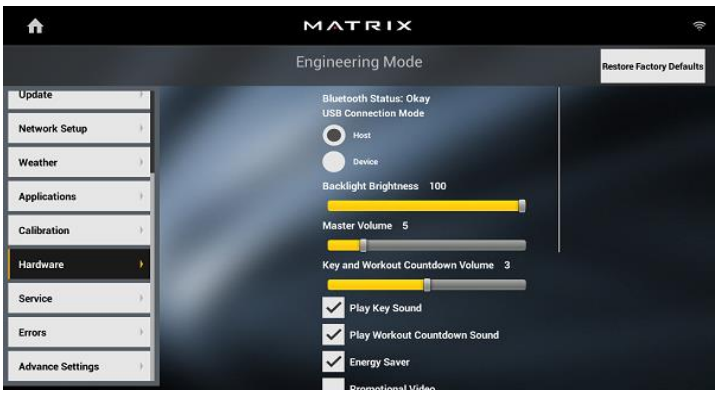
Engineering Applications

Engineering Errors

Engineering Calibration

Engineering Advanced Settings

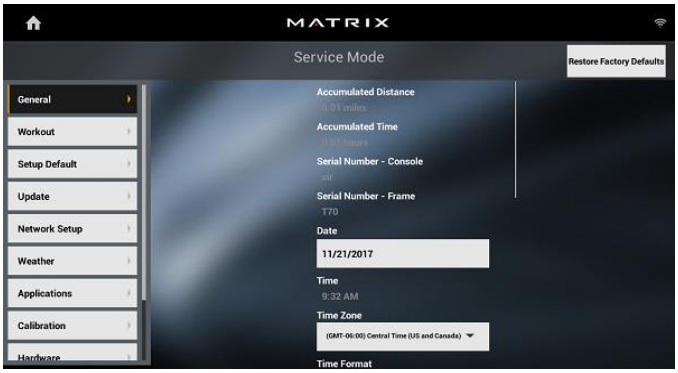
Engineering Hardware (I)



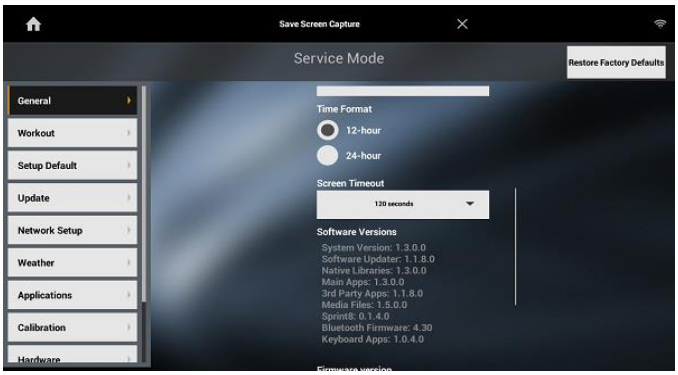
Engineering Hardware (II)

Service Mode I

Service General (I)



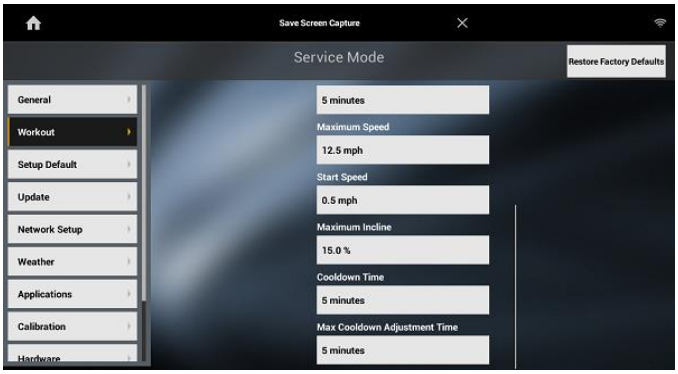
Service General (II)



Service General (III)

Service Workout (I)

Service Workout (II)



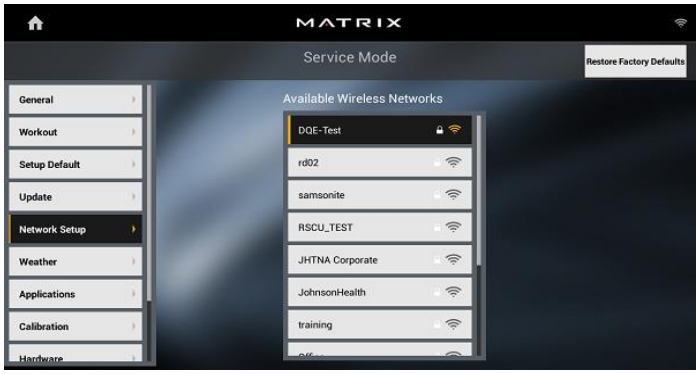
Service Setup Default (I)

Service Setup Default (II)

Service Update

Service Network Setup (I)

Service Network Setup (II)



Service Mode II

Service Weather

Service Applications

Service Calibration

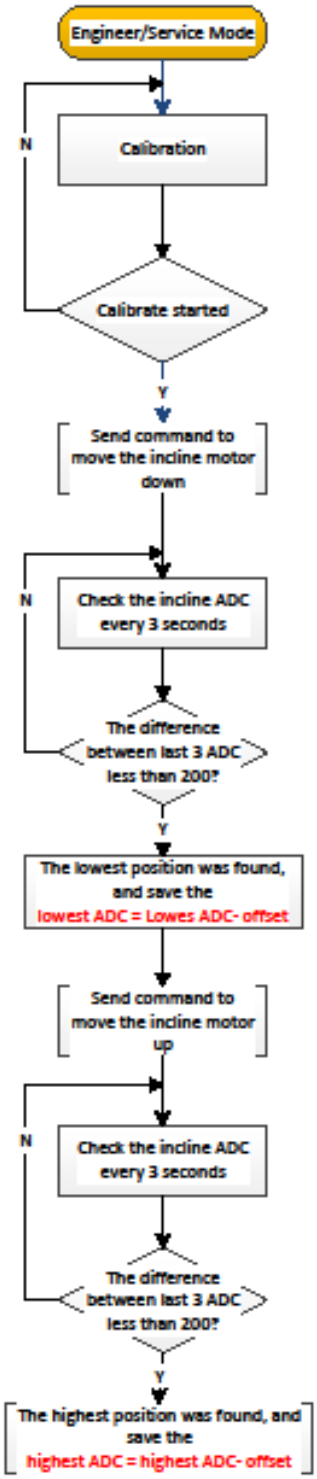
Service Hardware (I)

Service Hardware (II)

Service Service

Service Errors

Auto Calibration TM

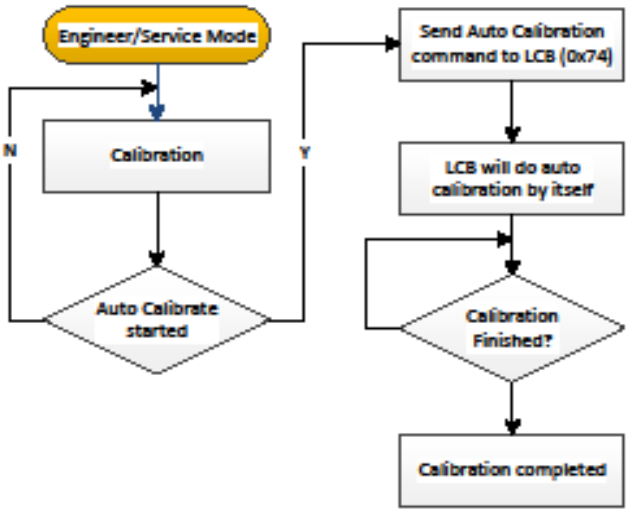


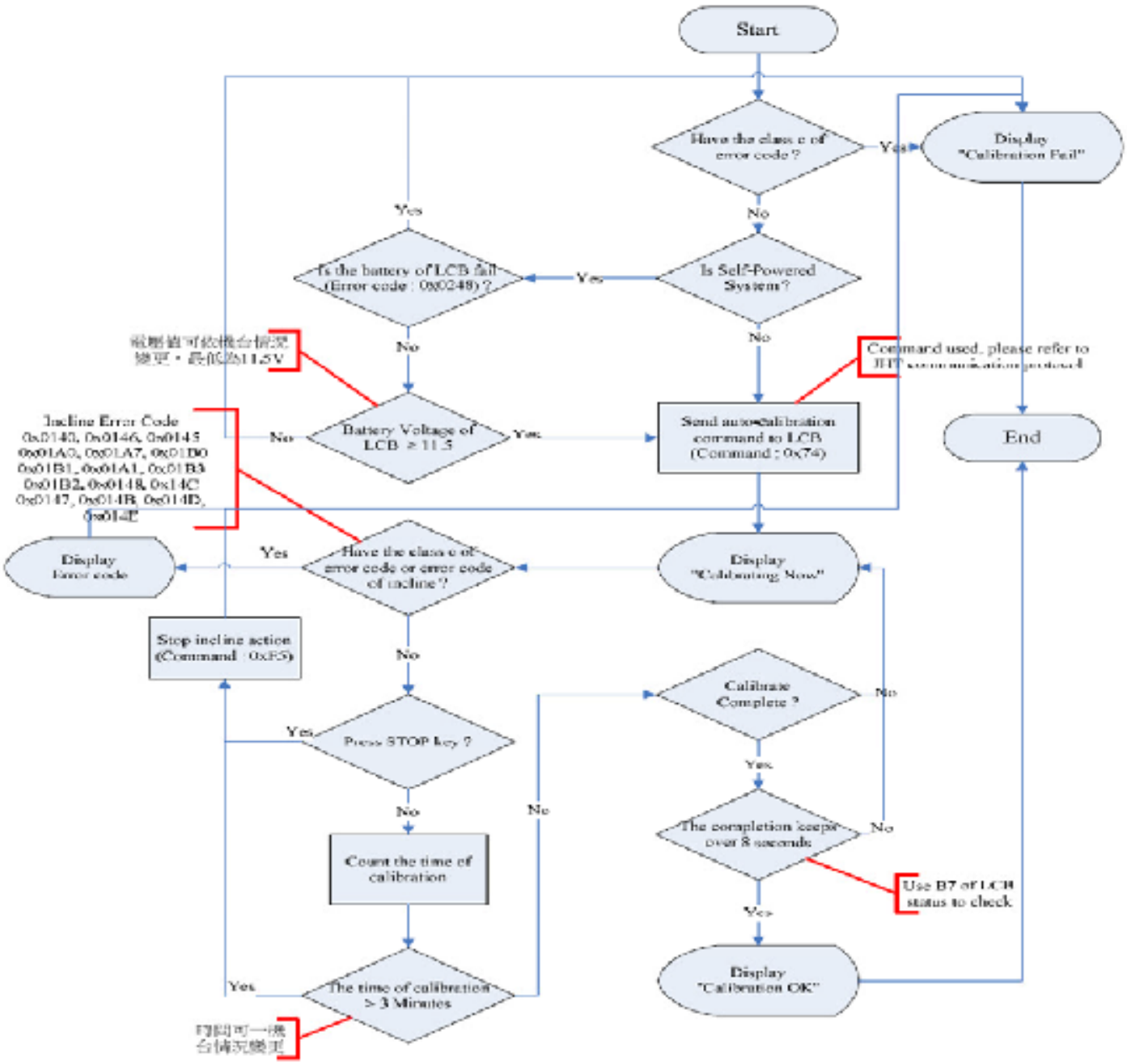
Note: the Offset is provided from system engineer, need be tested on real unit

Manager Calibration Screen (I)

Manager Calibration Screen (II)

Auto Calibration Ascent





Matrix Retail T70 Incline Calibration Flow Chart

Defau

Click on "Calibrate"

Calibrating Treadmill

Finding the minimum incline. Hit stop to cancel the calibration.

Stop

Click on "Stop"

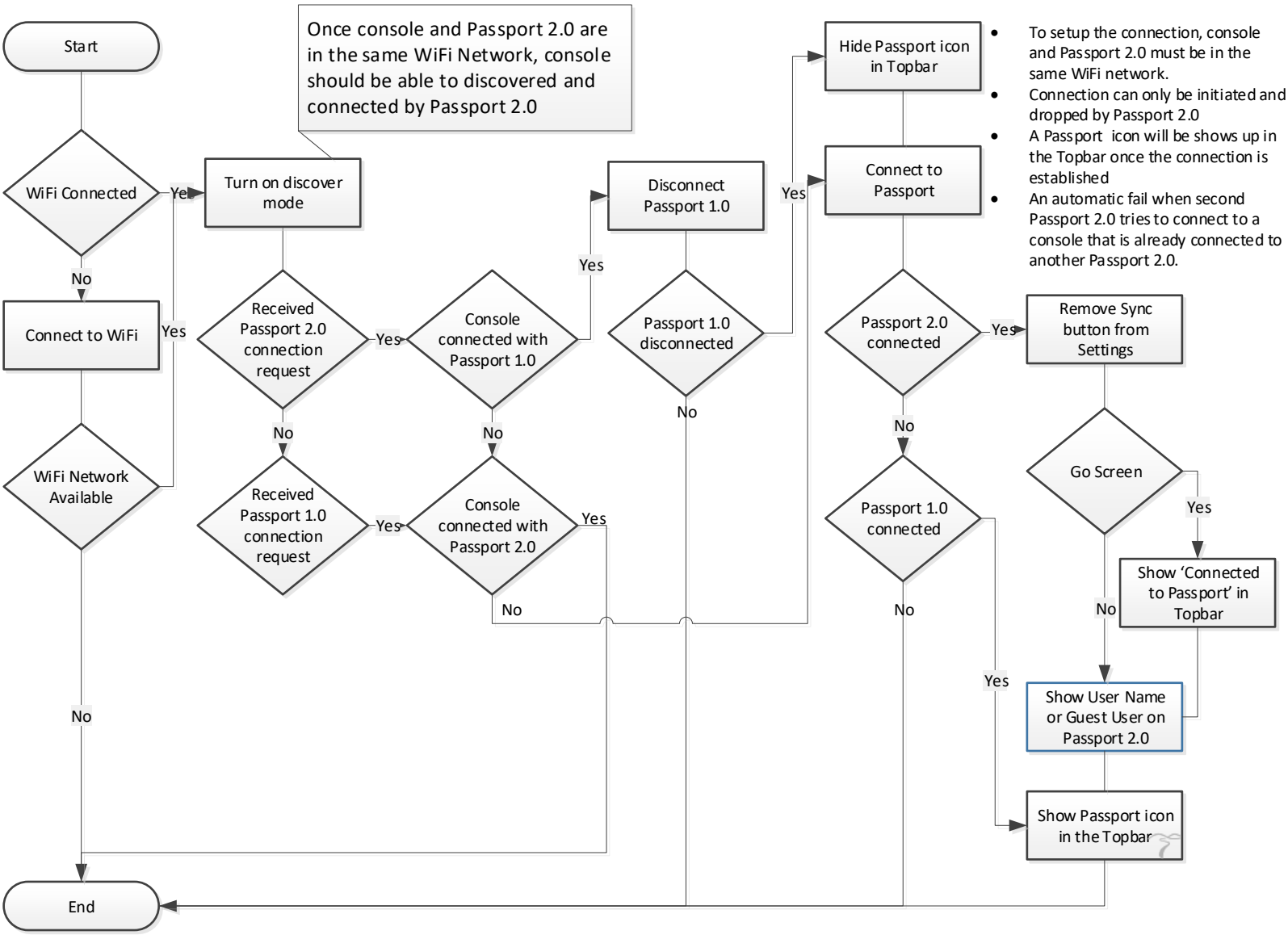
Minimum incline ADC position reached uses 35328 by default

Calibration IV – Matrix Retail T75 Incline

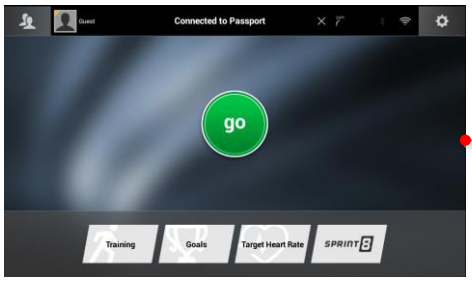
To calibrate Matrix Retail T75: Follow flow for T70 (Calibration III page).
See table below for ADC values

	Default Max incline ADC	Max Incline ADC Valid Range	Default Min Incline ADC	Min Incline ADC Valid Range
T75	54126	51072 - 54126	35328	35328 - 43136
T70	59008	51072 - 59008	35328	35328 - 43136
TF30/TF 50	NA	NA	NA	NA
T30/T50	NA	NA	NA	NA

Passport 2.0 – Setup Connection



- To setup the connection, console and Passport 2.0 must be in the same WiFi network.
- Connection can only be initiated and dropped by Passport 2.0
- A Passport icon will be shows up in the Topbar once the connection is established
- An automatic fail when second Passport 2.0 tries to connect to a console that is already connected to another Passport 2.0.

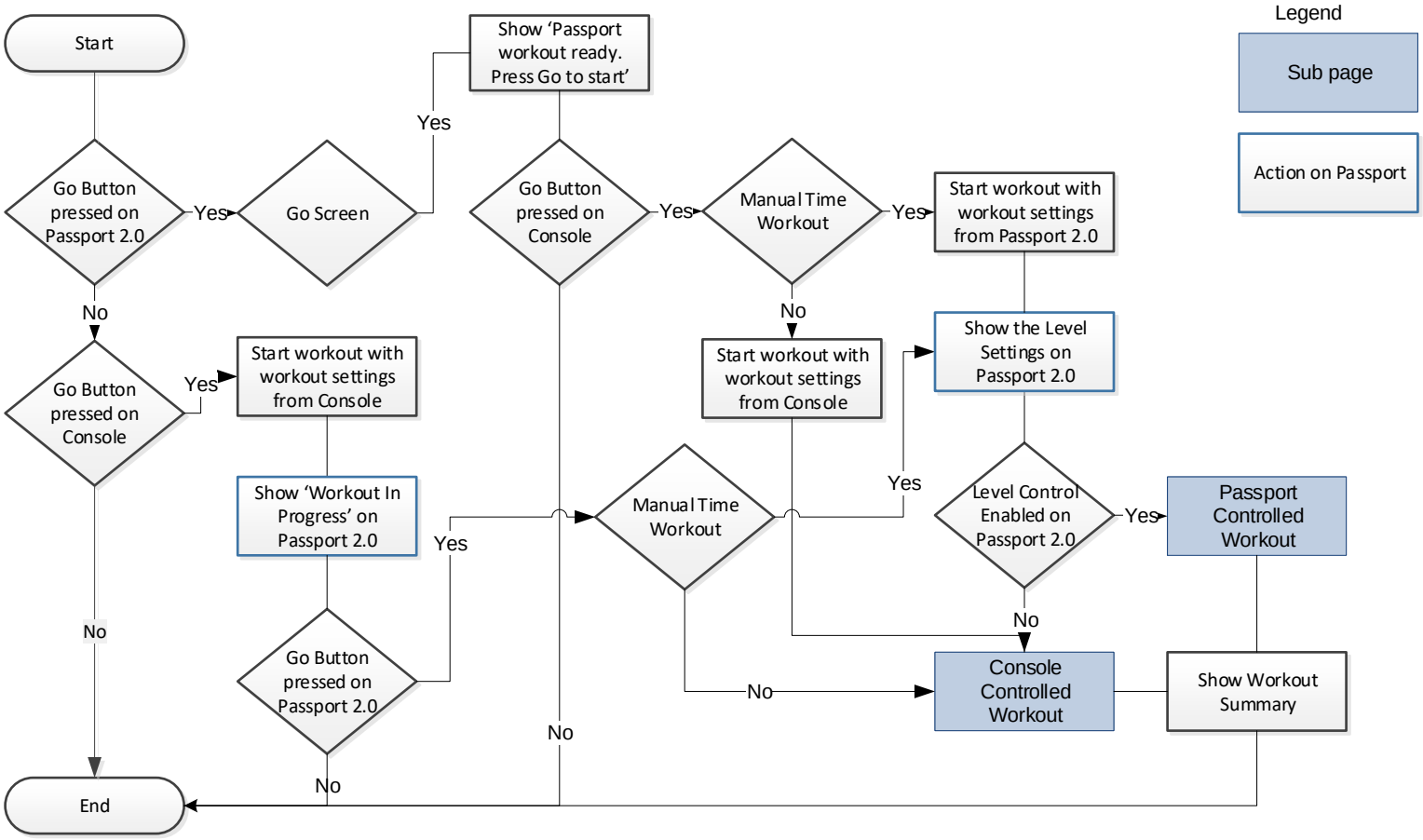


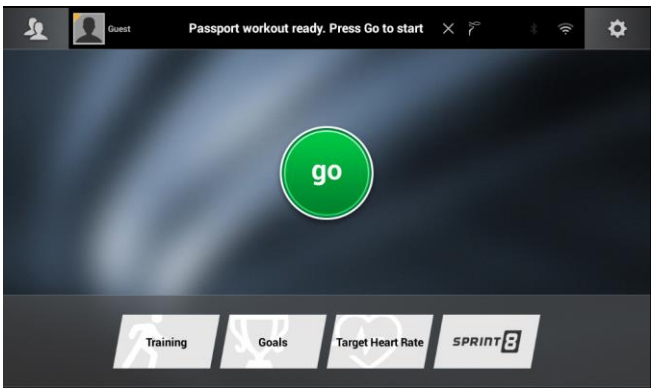
Connected to Passport

Show Passport icon in the Topbar

Remove the sync button from settings

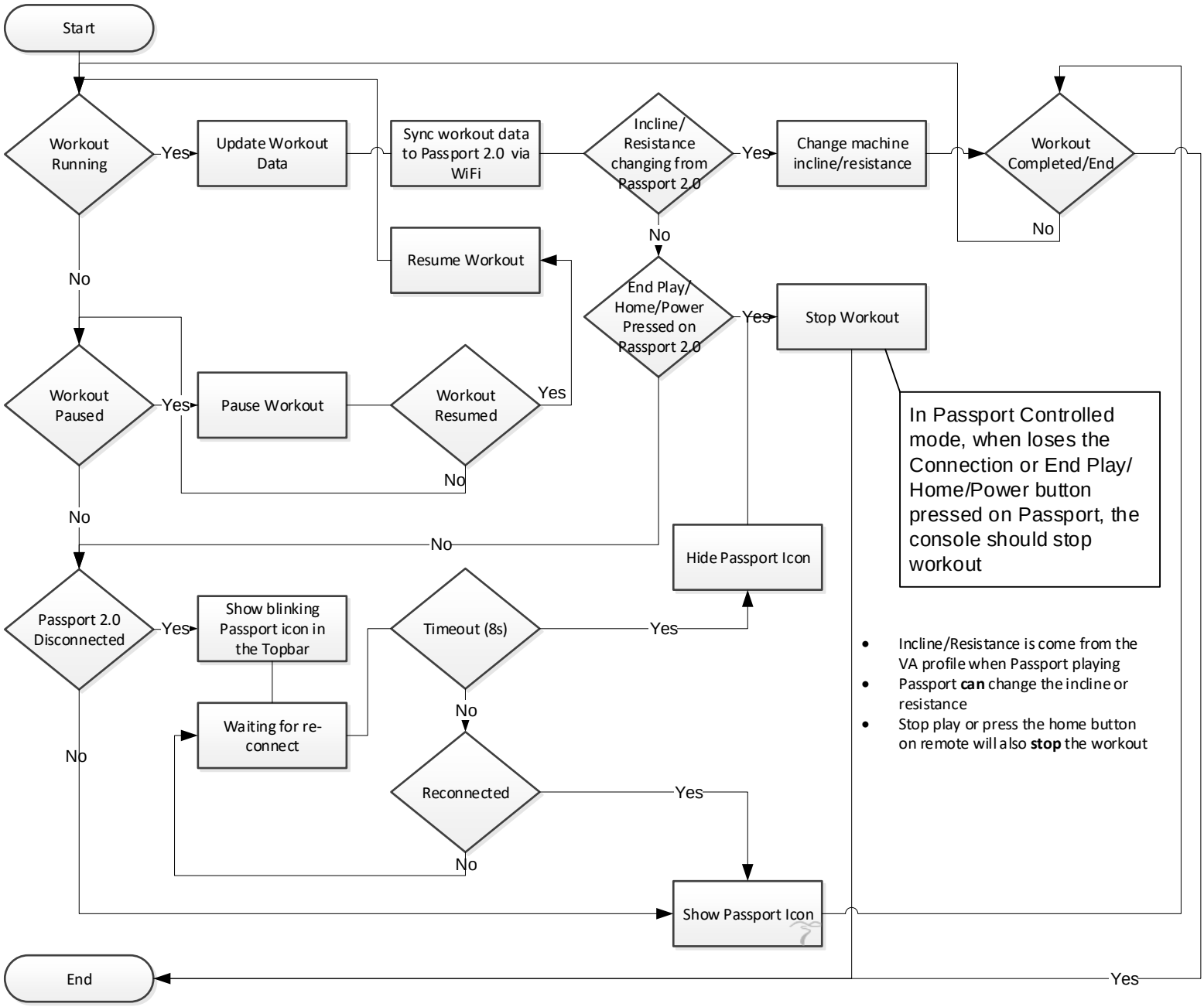
Passport 2.0 – Setup Workout





Passport workout ready. Press Go to start

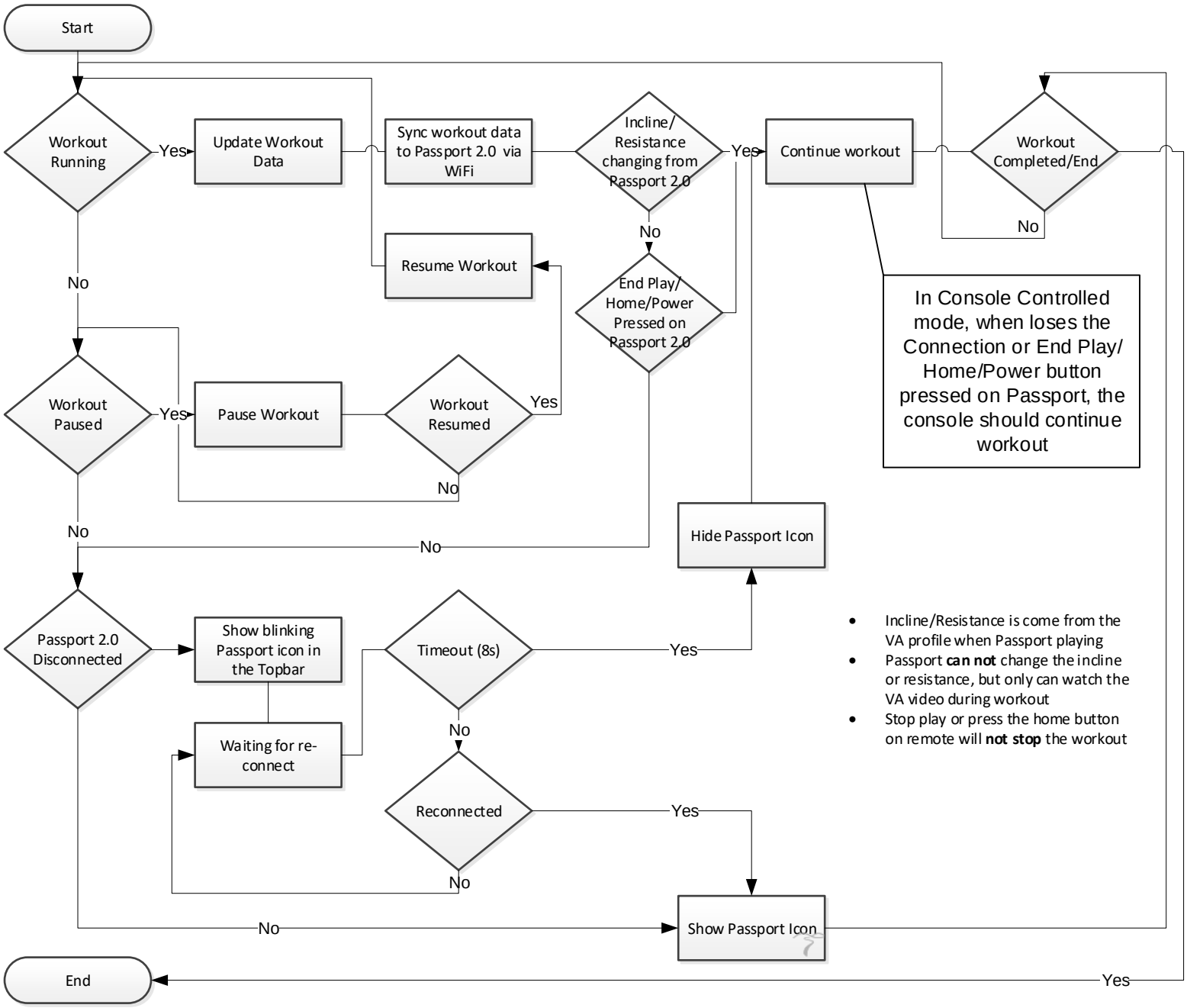
Passport 2.0 – Passport Controlled Workout



In Passport Controlled mode, when loses the Connection or End Play/ Home/Power button pressed on Passport, the console should stop workout

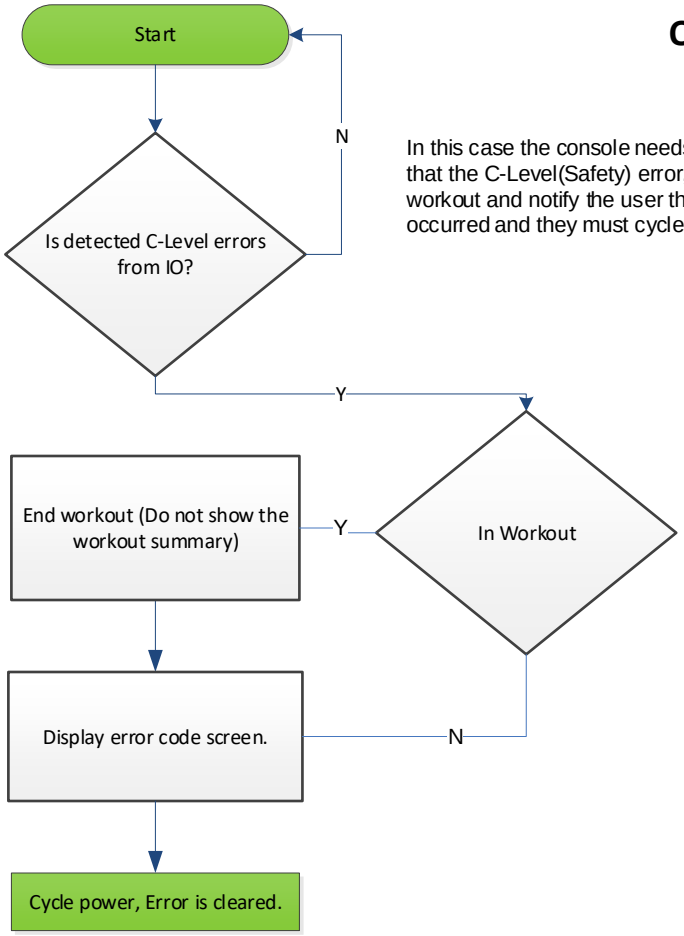
- Incline/Resistance is come from the VA profile when Passport playing
- Passport **can** change the incline or resistance
- Stop play or press the home button on remote will also **stop** the workout

Passport 2.0 – Console Controlled Workout



- Incline/Resistance is come from the VA profile when Passport playing
- Passport **can not** change the incline or resistance, but only can watch the VA video during workout
- Stop play or press the home button on remote will **not stop** the workout

Only for Climbmill



In this case the console needs to detect that the C-Level(Safety) error, end the workout and notify the user that an error occurred and they must cycle the power.

Currently the console polls the IO every second.

<u>Error Code Screen</u>

Category	Error	Code	Class (C - Safety) (B - Functional)	EN ClimbMill	Retail ClimbMill	Description	Condition
DC brake	Manual switch error	0x02C0	C	V	V	Manual switch is released.	Manual switch is released for 2 seconds.
	手動開關錯誤					手動開關被放開	手動開關被放開2秒以上
	~~Function error~~	~~0x02BE~~	~~C~~	~~V~~	~~V~~	~~Don't brake the turning of flywheel.~~	~~DC brake is locked, but RPM is not zero for 5 seconds.~~
	~~功能異常~~					~~無法制動飛輪轉動~~	~~剎車器鎖定，但是RPM非0, 五秒以上。~~
	~~Not working~~	~~0x02CC~~	~~C~~	~~V~~		~~DC brake is not working.~~	~~The difference of DC brake sensor between locking and unlocking is too small.~~
	~~無法做動~~					~~剎車器無法做動~~	~~剎車器釋放前後的壓力感應器的值，差異過小。~~
	斷線	0x02CD	C	V	V	DC brake disconnects.	After unlocking DC brake, the current of DC brake is less than 0.1A for 1.5 seconds.
	Disconnection					剎車器沒連接	當釋放剎車器之後，偵測到煞車器電流低於0.1A持續1.5秒
	Over current	0x02BF	C	V	V	The current is too big.	Above 1A/24V(1.7A/36V), 3 seconds. Above 1.2A/24V(1.8A/36V), 1 second Above 1.4A/24V(1.95A/36V), 0.5 second
	過電流					電流過大	大於1A/24V(1.7A/36V), 3秒。 大於1.2A/24V(1.8A/36V), 1秒 大於1.4A/24V(1.95A/36V), 0.5秒
ontrol zor	Frequency error	0x02C4	C	V		The frequency is out of range.	The frequency is out of 6 - 20Hz for 10 seconds
	頻率異常					頻率超出範圍	頻率超出6-20Hz持續10秒
	Disconnection	0x02C6	C	V		EN: No hardware signal(frequency) into LCB	EN: No hardware signal(frequency) for 3 seconds
	斷線					EN: 無訊號(頻率)進入下控制板	EN: 無硬體訊號(頻率)持續3秒
	Disconnection				V	Reatil: 壓力感應器值過大	Reatil: 壓力感應器值大於325持續3秒
	斷線					Reatil: The value of pressure sensor is too big.	Reatil: The value of pressue value is more than 325 for 3 seconds.
me IR sen	Frequency error	0x02C5	C	V	V	The frequency is out of range.	The frequency is out of 10 - 46Hz for 10 seconds
	頻率異常					頻率超出範圍	頻率超出10-46Hz持續10秒
	Disconnection	0x02C7	C	V	V	No hardware signal into LCB	No hardware signal for 3 seconds
	斷線					無硬體訊號進入下控制板	無硬體訊號持續3秒
ectromagr	Over current	0x01AC	C	V	V	The current is too big.	PWM < 20% and The current > 1.9A for 200ms
	過電流					電流過大	PWM < 20% 且 電流 > 1.9A 持續 200ms
	Disconnection	0x01AF	C	V	V	There is not the current.	PWM > 75% and The current < 0.1A for 5 seconds
	斷線					無電流	PWM > 75% 且 電流 < 0.1A 持續 5秒
Fan	LCB fan error	0x0249	B	V	V	LCB fan is disconnection or LCB fan current is too big.	After turning on the fan, the current > 0.15A for 2 seconds or the current < 0.02A for 5 seconds
	控制板風扇異常					下控制板風扇無接或電流過大	開啟風扇後，電流>0.15A持續2秒或電流<0.02A持續5秒
	ECB fane error					ECB fan is disconnection or LCB fan current is too big.	After turning on the fan, the current > 0.15A for 2 seconds or the current < 0.02A for 5 seconds
	電磁鐵風扇異常					電磁鐵風扇無接或電流過大	開啟風扇後，電流>0.15A持續2秒或電流<0.02A持續5秒
	Over speed	0x02C1	C	V	V	Actual speed exceeds target speed too much.	1. Actual speed is more than 195 SPM for 1 second. 2. Actual speed exceeds target speed and the difference is over 24 SPM for 2 seconds.
	速度過大					實際速度超過目標速度過多	1. 實際速度大於195SPM持續1秒 2. 實際速度超過目標速度，而且差異超過24SPM持續2秒
eed contr	Speed sensor(encoder) error	0x02A0	C	V		Speed sensor is no response.	The footplates turns over 5 steps, but speed detection is zero for 500ms.
						速度Sensor無反應	踏板轉動超過5步並且速度偵測等於0持續500ms
	速度Sensor異常				V	Speed sensor is no response.	RPM of the 1st speed sensor is zero, but RPM of the 2nd speed sensor is not zero for 2 seconds
						速度Sensor無反應	第一組Speed sensor無RPM但第二組有，持續2秒。
	The 2nd speed sensor error	0x0250	B >> C		V	The 2nd speed sensor is no response.	RPM of the 2nd speed sensor is zero, but RPM of the 1st speed sensor is not zero for 2 seconds
	第二組速度Sensor異常					第二組速度Sensor無反應	第二組Speed sensor無RPM但第一組有，持續2秒。
	Position sensor error	0x024B	B	V	V	Position sensor is no response.	Speed detection is non-zero, but the position sensor is no response for 10 seconds
	定位Sensor異常					定位Sensor無反應	速度不為0，但是定位Sensor沒反映持續10秒
Digital communication	Communication error	0x04A0	C	V	V	No communication of console	Not ErP mode, there is no command from console for 3 seconds.
	通訊異常					儀表無通訊	非ErP模式下，儀表無命令持續3秒
	Machine type error	0x02AB	C	V	V	Machine type error	The machine code is error
	機種錯誤					機種錯誤	機種代碼錯誤
	Resistance type error	0x02B4	C	V	V	Resistance type error	The resistance code is error
	阻力型態錯誤					阻力型態錯誤	阻力代碼錯誤
	Command error	0x0441	B	V	V	The command is not supported.	The command is not supported.
	命令錯誤					命令不支援	命令不支援
Digital communi	Excessive command error	TBD	C	V	V	Too many unsupported commands received	60 Unsupported commands received in 1 second