## **NORAMCO** FITNESS

13901 Highway 105 West Conroe, TX 77304

www.NoramcoFitness.com

# Version 1.8 Display Speed & Grade Calibration

**NOTE:** After you begin either of the calibration processes, you must complete the process by pressing STOP repeatedly until the lights go out and the treadmill enters normal mode. If you exit the process by shutting down the power or pulling the stop magnet, your settings will not be saved.

**Short Cuts:** Hold down the FASTER and SLOWER buttons to skip speed calibration and move into grade calibration.

#### **Speed Calibration**

- 1. Hold down the FASTER and SLOWER buttons until "SPd CAL" is displayed, then release.
- 2. Press STOP to begin the speed calibration process.
- 3. Use the FASTER or SLOWER buttons to adjust the speed of the treadmill to 0.5 mph. The upper left window will display a PWM value that can be used to approximate the correct speed, but this number can vary widely. Start with the number 25 in the upper left window, then count the belt revolutions to set the speed correctly. Count the belt revolutions by watching for the belt seam. 0.5 mph is equal to 4.5 belt revolutions per minute on a 117" belt (Treadmill serial numbers 500 to 802). 0.5 mph is equal to 4 belt revolutions per minute on a 135" belt (Treadmill serial numbers 10001 and higher).
- 4. Press STOP to enter the setting into memory and proceed to the high-end speed calibration.
- 5. Use the FASTER and SLOWER buttons to adjust the speed of the treadmill to 10 mph. The upper left window will display a PWM value that can be used to approximate the correct speed, but this number can vary widely. Start with the number 143 in the upper left window, then count the belt revolutions to set the speed correctly. Count the belt revolutions by watching for the belt seam. 10 mph is equal to 90 belt revolutions per minute on a 117" belt (Treadmill serial numbers 500 to 802). 10 mph is equal to 78 belt revolutions per minute on a 135" belt (Treadmill serial numbers 10001 and higher).
- 6. Press STOP to enter the setting into memory and proceed to the mid-range speed calibration.
- 7. Use the FASTER and SLOWER buttons to adjust the speed of the treadmill to 5.3 mph. The upper left window will display a PWM value that can be used to approximate the correct speed, but this number can vary widely. Start with the number 84 in the upper left window, then count the belt revolutions to set the speed correctly. Count the belt revolutions by watching for the belt seam. 5.3 mph is equal to 48 belt revolutions per minute on a 117" belt (Treadmill serial numbers 500 to 802). 5.3 mph is equal to 41 belt revolutions per minute on a 135" belt (Treadmill serial numbers 10001 and higher).
- 8. Press STOP to enter the setting into memory and complete the speed calibration.

The speed calibration process is complete. If the board was previously calibrated, the treadmill will return to the idle state – ready for normal operation. If the board has never been calibrated before, the display will automatically proceed to incline calibration.

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**Short Cuts:** Hold down the FASTER and SLOWER buttons to skip speed calibration and move into grade calibration.

#### **Grade Calibration**

- 1. Hold down the FASTER and SLOWER buttons until "Grd CAL" is displayed then release.
- 2. Press STOP to begin the grade calibration process. The treadmill will incline all the way up and stop.
- 3. Press STOP to enter the setting into memory and proceed to the decline calibration. The treadmill will decline all the way down and stop.
- 4. Press STOP to enter the settings into memory and complete the grade calibration process.
- 5. If everything is working properly "PASS" should be displayed in the Time Window.
- 6. Press STOP.

Grade calibration process is complete. The treadmill will return to the idle state – ready for normal operation.

Note: The "Calories" window will display the lift motor potentiometer voltages. This number should go up and down smoothly. If the pot reads erratically during the calibration process, "PF" (pot failure) will be displayed in the time window.

### **General Operation Failure Codes**

- 1) The display will blink "PF" in the grade window if the pot reads erratically.
- 2) If the analog to digital converter on the processor fails, "CF" will be displayed in the grade window.
- 3) If at any time the EEPROM fails to record when a write is attempted, the message "EEPROM FAILURE" will be displayed.
- 4) empted, the message "EEPROM FAILURE" will be displayed.