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**JOHNSON HEALTH INDUSTRY (VIETNAM) CO., LTD.**

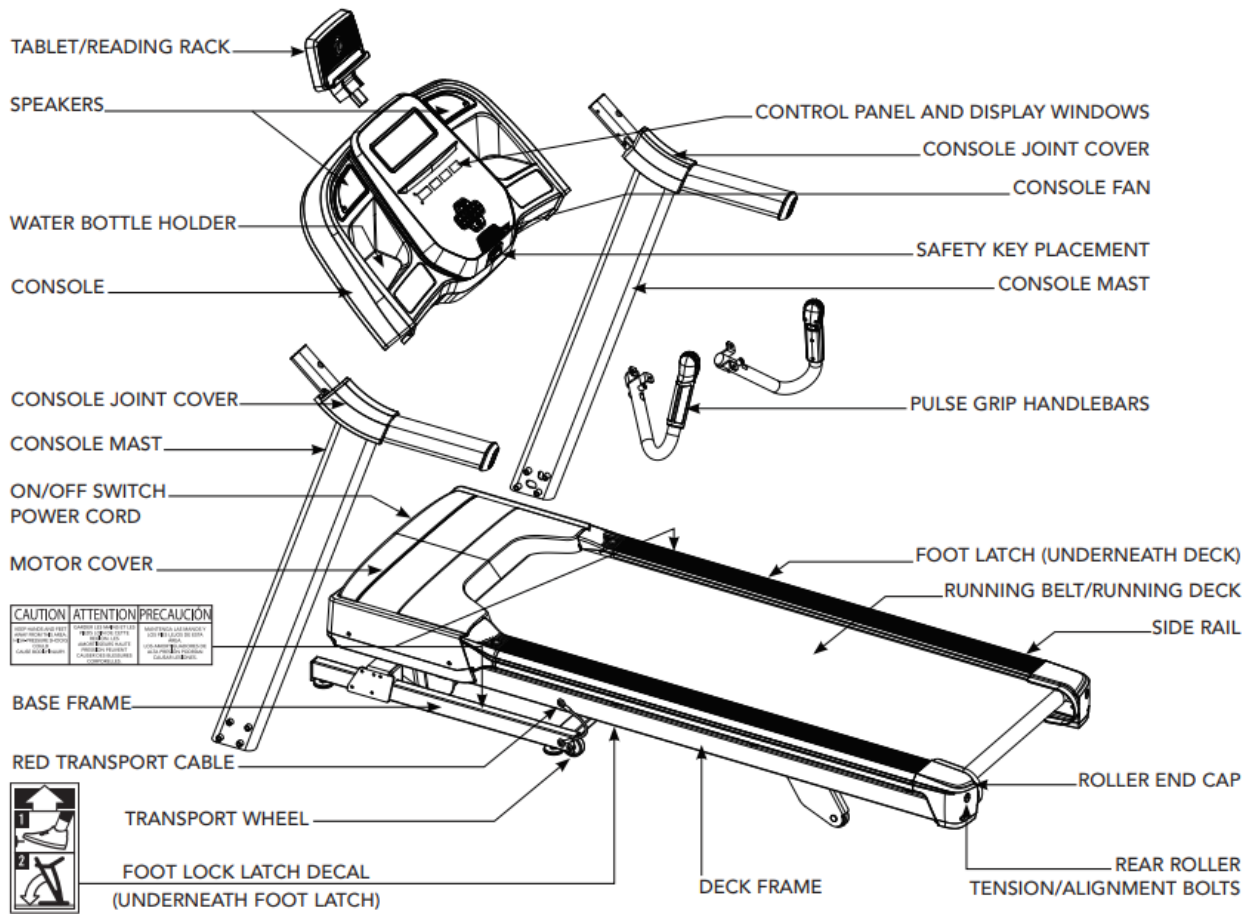
**7.0AT-04  
SERVICE MANUAL**



Approved by	Reviewed by	Prepared by
		Claire Nguyen



# PRODUCT BROWSER



# CONTENTS

CHAPTER 1: SERIAL NUMBER INFORMATION .....	6
1. 1 SERIAL NUMBER LOCATION .....	6
1.2 MODEL APPLY LIST (for reference) .....	7
CHAPTER 2: PREVENTATIVE MAINTENANCE.....	8
2.1 PREVENTATIVE MAINTENANCE.....	8
2.1.1 EVERY DAY (DAILY).....	8
2.1.2 EVERY WEEK (WEEKLY) .....	8
2.1.3 EVERY MONTH – IMPORTANT! .....	8
2.1.4 EVERY 3 MONTHS OR 150 MILES .....	8
2.2 TENSIONING & CENTERING THE RUNNING BELT.....	9
CHAPTER 3: CONSOLE INSTRUCTION.....	11
3.1 CONSOLE OPERATION.....	11
3.2 DISPLAY WINDOWS.....	12
3.3 GETTING STARTED.....	13
3.4 PROGRAM INFORMATION .....	17
CHAPTER 4: ENGINEERING MODE .....	20
4.1 ENGINEERING MODE .....	20
4.2 ENGINEERING MODE OVERVIEW.....	23
CHAPTER 5: TROUBLESHOOTING.....	25
5.1 WIRING SCHEMATIC.....	25
5.2 MCB WIRING INSTRUCTIONS .....	27
5.3 TROUBLESHOOTING SUMMARY .....	30
5.4 NO POWER TO THE CONSOLE .....	31
5.5 NO FUNCTION FOR SAFETY KEY .....	32
5.6 NO RESPONSE FOR MACHINE (CONSOLE & MOTOR) .....	33
5.7 INCLINE MOTOR ISSUES:.....	34
5.8 NOISE ISSUES.....	35
5.9 SPEAKER / AUDIO ISSUE.....	36
5.10 HEART RATE FUNCTION ISSUE .....	37
5.11 BLUETOOTH PAIRING ISSUE.....	38

CHAPTER 6: PART REPLACEMENT GUIDE.....	39
6.1 MOTOR REPLACEMENT.....	39
6.2 REAR ROLLER REPLACEMENT.....	40
6.3 SIDE RAIL REPLACEMENT .....	41
6.4 RUNNING DECK REPLACEMENT .....	42
6.5 FRONT ROLLER REPLACEMENT .....	43
6.6 RUNNING BELT REPLACEMENT .....	44
6.7 MOTOR CONTROL BOARD (MCB) REPLACEMENT .....	45
6.8 INCLINE MOTOR REPLACEMENT .....	46
6.9 CONSOLE OVERLAY SET REPLACEMENT.....	47
6.10 CONSOLE CIRCUIT BOARD REPLACEMENT.....	49
6.11 HEART RATE GRIP AND KEYPAD REPLACEMENT .....	50

# CHAPTER 1: SERIAL NUMBER INFORMATION

## 1. 1 SERIAL NUMBER LOCATION



(For example)



1.2 MODEL APPLY LIST (for reference)

ENTER YOUR SERIAL NUMBER AND MODEL NAME IN THE BOXES BELOW:

SERIAL NUMBER:	
TM	<input type="text"/>
MODEL NAME: <b>HORIZON</b>	<input type="text"/>
<b>TREADMILL</b>	

Refer to the SERIAL NUMBER and MODEL NAME when calling for service.

## CHAPTER 2: PREVENTATIVE MAINTENANCE

### 2.1 PREVENTATIVE MAINTENANCE

Preventative maintenance is the key to smoothly operating equipment, as well as keeping the user's liability to a minimum. Equipment needs to be inspected at regular intervals. Defective components must be replaced immediately. Improperly working equipment must be kept out of use until it is repaired. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so.

#### 2.1.1 EVERY DAY (DAILY)

Clean and inspect, following these steps:

- Turn off the treadmill with the ON / OFF switch, then unplug the power cord at the wall outlet.
- Wipe down the running belt, deck, motor cover, and console casing with a damp cloth. Never use solvents, as they can cause damage to the treadmill.
- Inspect the power cord. If the power cord is damaged, stop using and contact Customer Technical Support.
- Make sure the power cord is not underneath the treadmill or in any other area where it can become pinched or cut.
- Check the tension and alignment of the running belt. Make sure that the treadmill belt will not damage any other components on the treadmill by being misaligned.
- If any labels are damaged or illegible, contact Customer Technical Support for replacements.

#### 2.1.2 EVERY WEEK (WEEKLY)

Clean underneath the treadmill following these steps:

- Turn off the treadmill with the ON / OFF switch, then unplug the power cord at the wall outlet.
- Fold the treadmill into the upright position, making sure that the lock latch is secured.
- Move the treadmill to a remote location.
- Wipe or vacuum any dust particles or other objects that may have accumulated underneath the treadmill.
- Return the treadmill to its previous position

#### 2.1.3 EVERY MONTH – IMPORTANT!

- Turn off the treadmill with the ON / OFF switch, then unplug the power cord at the wall outlet.
- Inspect all assembly bolts of the machine for proper tightness.
- Remove the motor cover. Wait for ALL display screens to be off.
- Clean the motor and lower board area to eliminate any lint or dust particles that may have accumulated. Failure to do so may result in premature failure of key electrical components.
- Vacuum and wipe down the belt with a damp cloth. Vacuum any black / white particles that may accumulate around the unit. These particles may accumulate from normal treadmill use.

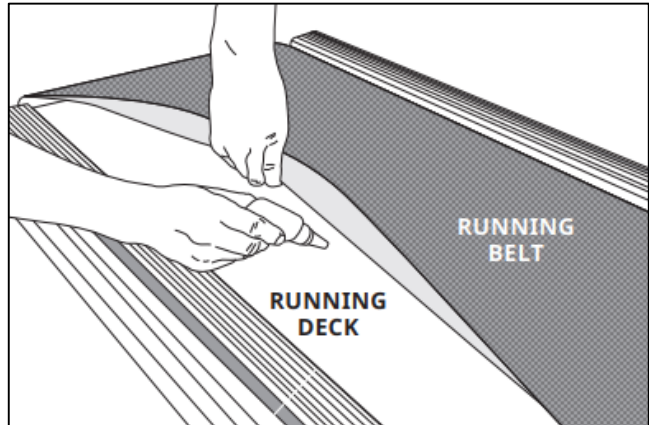
#### 2.1.4 EVERY 3 MONTHS OR 150 MILES

It is necessary to lubricate your treadmill running deck every three months or 300 miles (480 kilometers) to maintain optimal performance.



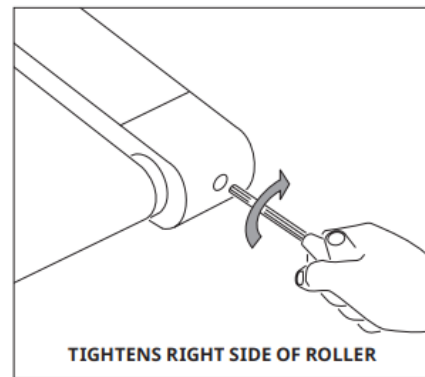
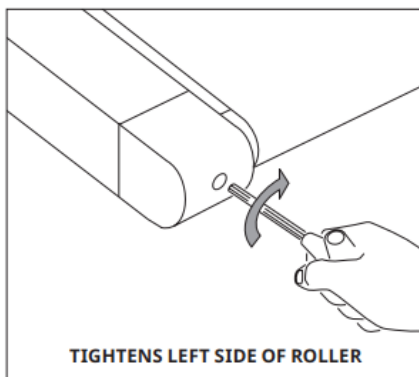
Your treadmill came with a bottle of lubricant which can be used for two applications.

- Turn off the treadmill with the on/off switch, then unplug the power cord at the wall outlet.
- Loosen both the rear roller bolts. (For best results, place two removable marks on both sides of the frame and note roller position). Once the belt is loosened, take the bottle of lubricant and apply it to the entire top surface of the running deck.
- Tighten both rear roller bolts (matching up the marks for proper position) to original position. After you have applied lubricant, plug in the power cord, insert the safety key, start the treadmill and walk on the belt or two minutes to spread the lubricant.
- Lubricate the air shocks with Teflon based spray.
- When lubrication is complete, hold the “speed up” (+) and “stop” keys for seconds. This will remove the message.



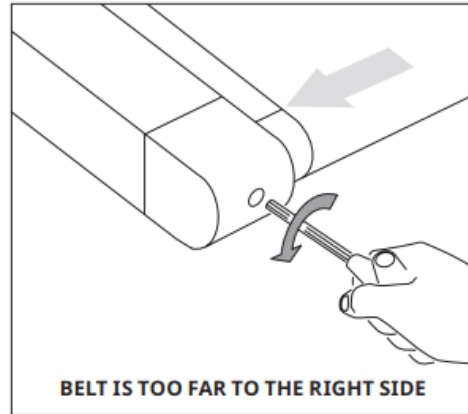
## 2.2 TENSIONING & CENTERING THE RUNNING BELT

If you can feel a slipping sensation when running on the treadmill, the running belt must be tightened. In most cases, the belt has stretched from use, causing the belt to slip. This is a normal and common adjustment. To eliminate this slipping, turn the treadmill off and tension both the rear roller bolts using the supplied Allen wrench, turning them  $\frac{1}{4}$  turn to the right as shown. Turn the treadmill on and check for slipping. Repeat if necessary, but never turn the roller bolts more than  $\frac{1}{4}$  turn at a time. Belt is properly tightened when the slipping sensation is gone.

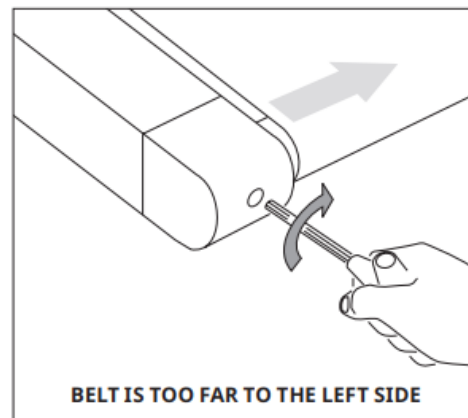


The running belt has been properly adjusted at the factory before it was shipped. At times the belt can move off-center during shipment. Before operating the treadmill, make sure the belt is centered and remains centered to maintain smooth operation.

If the running belt is too far to the right side: With the treadmill running at 1 mph, turn the left adjustment bolt counter-clockwise  $\frac{1}{4}$  turn at a time (using the supplied Allen wrench). Check the belt alignment. Allow belt to run a full cycle to gauge if more adjustment is needed. Repeat if necessary, until the belt remains centered during use.

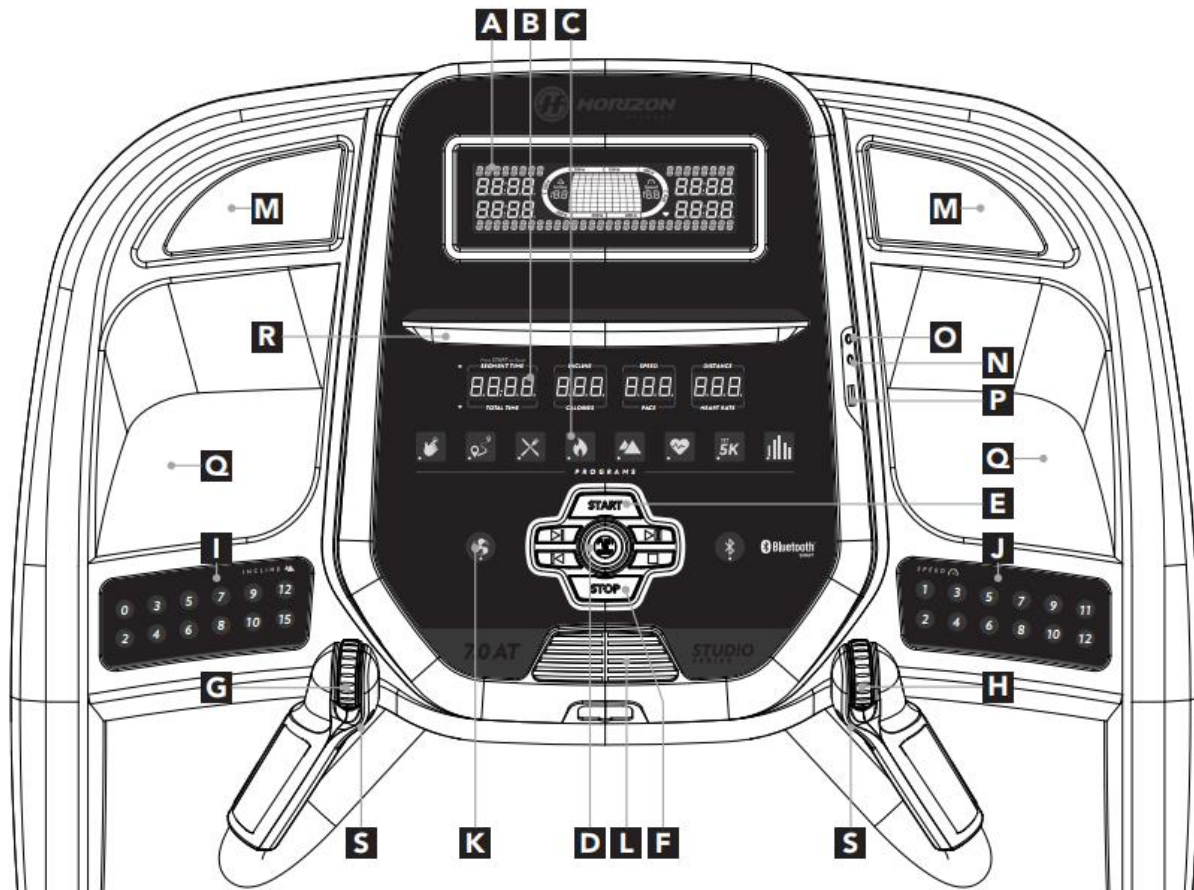


If the running belt is too far to the left side: With the treadmill running at 1mph, turn the right adjustment bolt counter-clockwise  $\frac{1}{4}$  turn at a time (using the supplied Allen wrench). Check the belt alignment. Allow belt to run a full cycle to gauge if more adjustment is needed. Repeat if necessary, until the belt remains centered during use.



## CHAPTER 3: CONSOLE INSTRUCTION

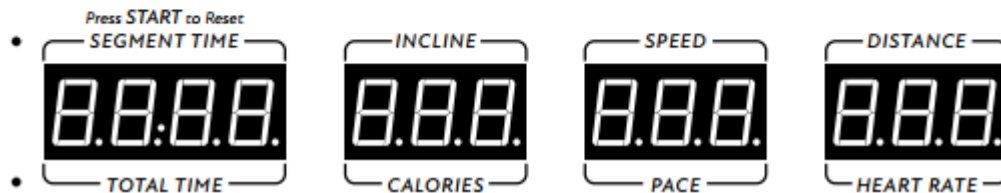
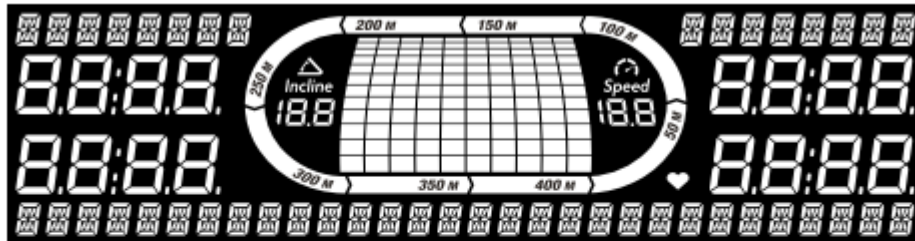
## 3.1 CONSOLE OPERATION



Note: There is a thin protective sheet of clear plastic on the overlay of the console that should be removed before use.

- A) **LCD DISPLAY WINDOW:** Calories, Place, Total time, Heart Rate, Incline, Speed
- B) **LED DISPLAY:** Segment Time, Incline, Speed, Distance, Total Time, Calories, Pace, Heart Rate.
- C) **WORKOUT LED INDICATORS:** indicates what workout is set for the current program.
- D) **SELECT TARGET/WORKOUT KNOB:** rotate/press to select your desired workout/target.
- E) **START (SPLIT):** press to START workout. When in a workout, press the START button to activate the SPLIT function and reset the segment timer to 0.
- F) **STOP:** press to pause/end your workout. Hold for 3 seconds to reset the console.
- G) **INCLINE SCROLL WHEEL:** used to adjust incline in small increments (.5%).
- H) **SPEED SCROLL WHEEL:** used to adjust speed in small increments (.1 MPH).
- I) **INCLINE QUICK KEYS:** used to reach desired incline more quickly.
- J) **SPEED QUICK KEYS:** used to reach desired speed more quickly.
- K) **FAN KEY:** press to turn fan on and off.

- L) **FAN:** personal workout fan.
- M) **SPEAKERS:** music plays through speakers when your CD / MP3 player is connected to the console.
- N) **AUDIO IN JACK:** plug your CD / MP3 player into the console using the included audio adaptor cable.
- O) **AUDIO OUT / HEADPHONE JACK:** plug your headphones into this jack to listen to your music through the headphones. Note: when headphones are plugged into the headphone jack the sound will no longer come out through the speakers.
- P) **USB INPUT:** 1A/5V USB output power.
- Q) **WATER BOTTLE POCKETS:** holds personal workout equipment.
- R) **TABLET/READING RACK:** holds tablet or reading material.
- S) **INTERVAL KEYS:** these are programmable keys. When an user is selected, they can be programmed to a desired speed and incline setting.



### 3.2 DISPLAY WINDOWS

- **SEGMENT TIME:** Timer that counts up from 0 seconds and resets to 0 when you press the START/SPLIT key during a workout.
- **INCLINE:** Shown as percent. Indicates the incline of your walking or running surface.
- **SPEED:** Shown as MPH. Indicates how fast your walking or running surface is moving.
- **DISTANCE:** Shown as miles. Indicates distance traveled during your workout.
- **TOTAL TIME:** Shows either the total time elapsed or remaining; depending on the workout selected.
- **CALORIES:** Total calories burned during your workout.
- **PLACE:** Indicates how many minutes it takes to complete a mile while running or walking at your current speed.
- **HEART RATE:** Shown as BPM (beats per minute). Used to monitor your heart rate (displayed when contact is made with both pulse grips).
- **TRACK:** Follows progress around a simulated track. Segments light up with every 50 meters completed.

### 3.3 GETTING STARTED

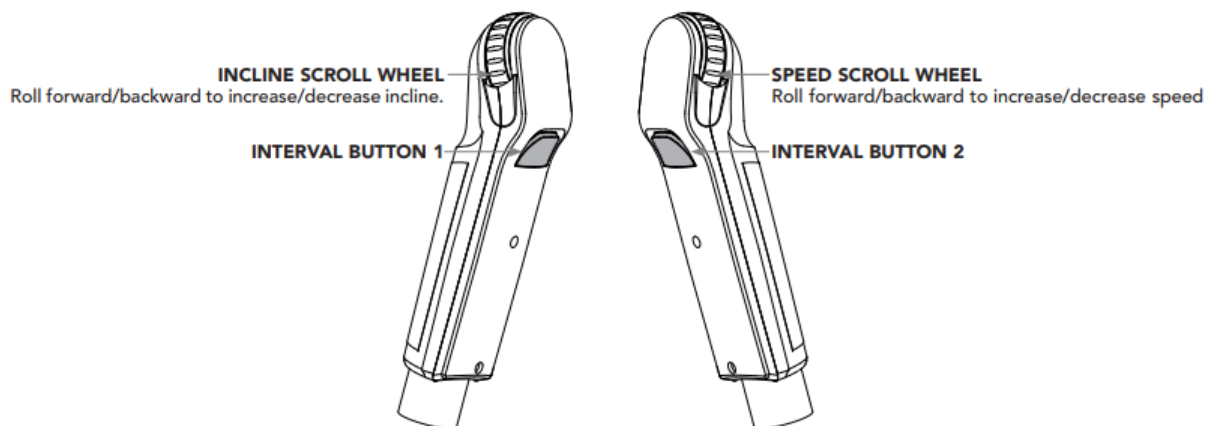
- 1) Check to make sure no objects are placed on the belt that will hinder the movement of the treadmill.
- 2) Plug in the power cord and turn the treadmill ON. (The ON/OFF switch is next to the power cord.)
- 3) Stand on the side rails of the treadmill.
- 4) Attach the safety key clip to part of your clothing making sure that it is secure and will not become detached during operation.
- 5) Insert the safety key into the safety keyhole in the console.
- 6) You have two options to start your workout.

#### A) QUICK START UP

Simply press the **START** key to begin working out.  
Time, distance, and calories will all count up from zero. OR...

#### B) SELECT A WORKOUT OR TARGET

- 1) Select your **USER** by turning the workout knob and then pressing when your desired **USER** is displayed.
- 2) Select your **WEIGHT** by turning the workout knob and then pressing when your desired **WEIGHT** is displayed.
- 3) Select your **PROGRAM** by turning the workout knob and then pressing when your desired **PROGRAM** is displayed.
- 4) Adjust the **SETTING** by turning the workout knob and then pressing when your desired **SETTING** is displayed.
- 5) Press **START** to begin.



#### HOW TO PROGRAM AND USE CUSTOM INTERVAL BUTTONS

The programmable interval buttons located on the pulse rate grips are designed to help you customize this machine to match whatever workout you like to do the most.

The **LEFT** and **RIGHT INTERVAL BUTTONS** are programmable for speed and incline.

To program the **INTERVAL** button, you **must select a user**, start the machine, set the desired speed and incline, press and hold the desired **INTERVAL** button for three seconds until the treadmill beeps. Now the **INTERVAL** button is programmed to your settings. After programming the **INTERVAL** button, it will remember the setting for that user until reprogrammed.

Now when the **INTERVAL** button is pressed, the treadmill speed and incline will change to the settings you programmed for that button.

The most common type of workout these keys will help with is interval training. We suggest programming one of the **INTERVAL** buttons to your high intensity segments and the other to your recovery segments.

Another common use is to set one **INTERVAL** button to your warm up and cool down settings and the other to your desired workout settings.

These buttons should allow you to customize the settings of your treadmill to quickly fit the type of workout you enjoy most.

#### TO RESET THE CONSOLE

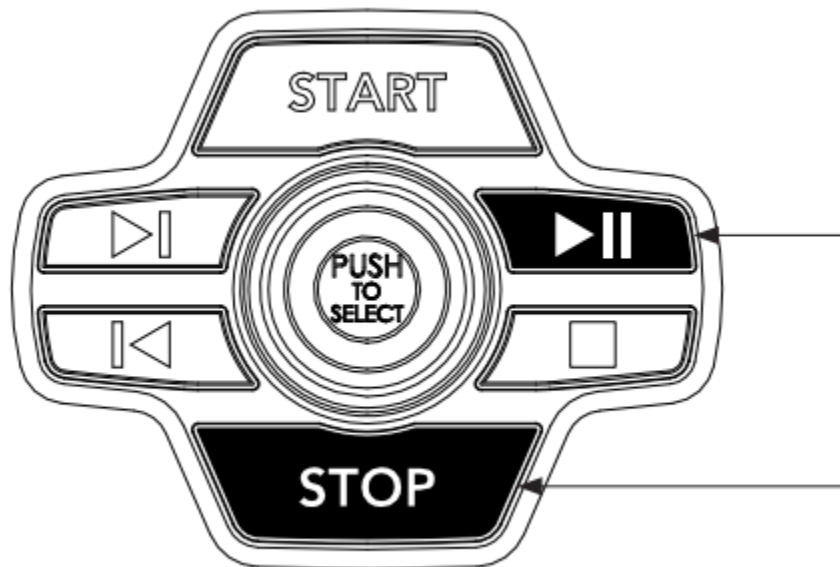
Hold STOP key for 3 seconds.

#### FINISHING YOUR WORKOUT

When your workout is complete, the unit will beep. Your workout information will stay displayed on the console for 30 seconds and then reset.

#### TO RESET THE LUBE BELT WARNING

The treadmill will flash “LUBE BELT” reminder every 150 mi. After lubricating belt, reset warning by holding down STOP and PLAY/PAUSE buttons for 5 seconds.



### BLUETOOTH HEART RATE MONITORING

The 7.0AT is equipped with multi-channel Bluetooth which enables you to wirelessly connect compatible Bluetooth heart rate monitoring devices to this treadmill. You will need to ensure that your wireless heart rate monitoring device is Bluetooth 4.0 compatible and is also “open” to sharing data. Non-“open” or “closed” devices typically only share data with their proprietary apps. The 7.0AT needs an “open” device to receive data from the device. You may need to consult with your device’s owner’s manual or the manufacturer to confirm if it is an open device.

Pair the receiver to the app and the console will receive the information from the tablet. To use the Bluetooth HR monitor without a tablet, press and hold the Bluetooth button to enable the console to communicate with the receiver. When paired with the Bluetooth HR monitor the console will not pair with a tablet. To enable tablet communication press and hold the Bluetooth button for 5 seconds or reset power.

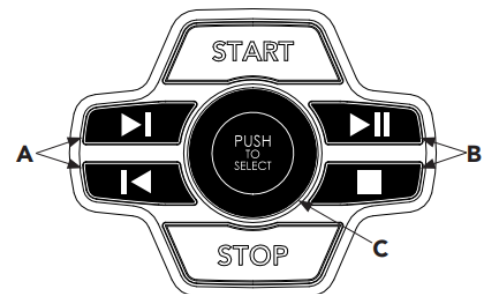
### USING YOUR MUSIC DEVICE

The 7.0AT treadmill will connect and stream music from your compatible music device. This includes many smart phones and traditional mp3 players.

Your 7.0AT comes equipped with Bluetooth speakers. Bluetooth compatible devices can stream music wirelessly from your device to the speakers. You can also connect your music device via an audio cable and stream music through the speakers. Instructions for both types of audio connection are detailed below.

### CONSOLE AUDIO CONTROLS

- A) **MEDIA SKIP KEYS:** Used to skip to previous or next audio track.
- B) **MEDIA RUN/PAUSE/STOP KEYS:** Top button used to pause/play media, bottom button stops media.
- C) **WORKOUT KNOB:** controls speaker volume during workout. Ensure your device volume is turned up.



### CONNECTING VIA BLUETOOTH 4.0LE

- 1) Check to ensure that your music device is Bluetooth 4.0 compatible
- 2) Go into your device’s Bluetooth settings and scan for devices.
- 3) On your music device, locate the Bluetooth device list. Select your treadmill or elliptical unit that appears on this list.  
Wait for your music device to finish pairing with the unit.
- 4) You will know when pairing is successful when your music device shows the treadmill or elliptical unit as now being a paired device.



### **WHEN UNIT IS POWERED OFF THEN BACK ON**

If you turn your treadmill or elliptical unit off, or if it goes into sleep mode, the next time it is powered on the unit will look to pair with the last music device with which it was paired. It will automatically pair at this time.

### **RE-PAIRING MUSIC DEVICES**

In the event that the unit cannot find the last paired music device (for example, the music device is off or not being used) then the unit will stop looking to pair with the music device. If this happens, and if you wish to use your music device again, then you will need to go through the pairing process listed above and re-pair through your music device's settings.

### **USING MULTIPLE MUSIC DEVICES**

If multiple devices are being paired with the unit (i.e.: multiple users are using the treadmill or elliptical unit and pairing their music devices with it) then the unit will look to pair with the last device used and "forget" other devices. If you wish to re-pair a "forgotten" music device, then you will need to un-pair the current paired device and then re-pair your device through the pairing procedure noted above.

### **CONNECTING VIA AN AUDIO CABLE**

- 1) Connect the included AUDIO ADAPTOR CABLE to the AUDIO IN JACK on the top right of the console and the headphone jack on your media device.
- 2) Use your media device buttons to adjust song settings.
- 3) Remove the AUDIO ADAPTOR CABLE when not in use.
- 4) If you don't want to use the SPEAKERS, you can plug your headphones into the AUDIO OUT JACK at the bottom of the console. This ensures that if you accidentally catch the headphone line while running, you won't drop your device to the ground.

### **HORIZON CONNECTED FITNESS SYSTEM**

Your Horizon machine is Bluetooth ready, allowing you to use Bluetooth 4.0 technology to wirelessly connect your device and other apps to your Horizon treadmill. For a complete list of 3rd party fitness apps compatible with your Horizon treadmill follow the link below:

<http://horizonfit.co/7-0AT-04>





### 3.4 PROGRAM INFORMATION



**1) MANUAL:** Control everything about your workout – from start to finish. This program is a basic workout with no pre-defined settings, allowing you to manually adjust the machine at any time. It begins with an incline at 0 and speed at 0.5 mph.



**2) DISTANCE:** Push yourself and go further during your workout with 13 distance workouts. Choose from 1 mile, 2 miles, 5k, 5miles, 10k, 8 miles, 15k, 10 miles, 20k, half marathon, 15 miles, 20 miles, and marathon goals. You set your level.

**Incline changes and all segments are 0.16Km.**

Segment	Warm Up		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Distance	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km	0.16km
Level 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Level 2	0	0.5	1	3	2	3	2	3	2.5	3.5	2.5	3	2	3	2	3	1
Level 3	0.5	1	1.5	3.5	1.5	3.5	2.5	3.5	2.5	4	2.5	3.5	2.5	3.5	1.5	3.5	1.5
Level 4	0.5	1	1.5	3.5	2.5	3.5	2.5	3.5	3	4	3	3.5	2.5	3.5	2.5	3.5	1.5
Level 5	1	1.5	2	4	2	4	3	4	3	4.5	3	4	3	4	2	4	2
Level 6	1	1.5	2	4	3	4	3	4	3.5	4.5	3.5	4	3	4	3	4	2
Level 7	1.5	2	2.5	4.5	2.5	4.5	3.5	4.5	3.5	5	3.5	4.5	3.5	4.5	2.5	4.5	2.5
Level 8	1.5	2	2.5	4.5	3.5	4.5	3.5	4.5	4	5	4	4.5	3.5	4.5	3.5	4.5	2.5
Level 9	2	2.5	3	5	3	5	4	5	4	5.5	4	5	4	5	3	5	3
Level 10	2	2.5	3	5	4	5	4	5	4.5	5.5	4.5	5	4	5	4	5	3



**3) CALORIES:** Set goals for burning calories from 20 to 980 calories in 20 calorie increments. You set your level to keep you in your fat burning zone.

**Incline changes and all segments are 20 calories.**

Segment	Warm Up		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Distance	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal	20 cal
Level 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Level 2	0	0.5	1	3	2	3	2	3	2.5	3.5	2.5	3	2	3	2	3	1
Level 3	0.5	1	1.5	3.5	1.5	3.5	2.5	3.5	2.5	4	2.5	3.5	2.5	3.5	1.5	3.5	1.5
Level 4	0.5	1	1.5	3.5	2.5	3.5	2.5	3.5	3	4	3	3.5	2.5	3.5	2.5	3.5	1.5
Level 5	1	1.5	2	4	2	4	3	4	3	4.5	3	4	3	4	2	4	2
Level 6	1	1.5	2	4	3	4	3	4	3.5	4.5	3.5	4	3	4	3	4	2
Level 7	1.5	2	2.5	4.5	2.5	4.5	3.5	4.5	3.5	5	3.5	4.5	3.5	4.5	2.5	4.5	2.5
Level 8	1.5	2	2.5	4.5	3.5	4.5	3.5	4.5	4	5	4	4.5	3.5	4.5	3.5	4.5	2.5
Level 9	2	2.5	3	5	3	5	4	5	4	5.5	4	5	4	5	3	5	3
Level 10	2	2.5	3	5	4	5	4	5	4.5	5.5	4.5	5	4	5	4	5	3



**4) FAT BURN:** Relatively slow and steady is the name of the game to maximize your weight-loss goals. Promotes weight loss by increasing and decreasing the speed and incline, while keeping you in your fat burning zone.

**Speed and Incline changes, segments repeat every 30 seconds.**

Segment	Warm Up		1	2	3	4	5	6	7	8	
Time	4:00 Mins		30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	
Level 1	Incline	0	0.5	1.5	1.5	1	0.5	0.5	1	1.5	
	Speed	0.5	1.5	2	2.5	3	3.5	4	3.5	3	2.5
Level 2	Incline	0	0.5	1.5	1.5	1	0.5	1	0.5	1	1.5
	Speed	0.5	1.9	2.5	3	3.5	4	4.5	4	3.5	3
Level 3	Incline	0.5	1	2	2	1.5	1	1	1	1.5	2
	Speed	0.5	2.3	3	3.5	4	4.5	5	4.5	4	3.5
Level 4	Incline	0.5	1	2	2	1.5	1	1	1	1.5	2
	Speed	1	2.6	3.5	4	4.5	5	5.5	5	4.5	4
Level 5	Incline	1	1.5	2.5	2.5	2	1.5	1.5	1.5	2	2.5
	Speed	1	3	4	4.5	5	5.5	6	5.5	5	4.5
Level 6	Incline	1	1.5	2.5	2.5	2	1.5	1.5	1.5	2	2.5
	Speed	1	3.4	4.5	5	5.5	6	6.5	6	5.5	5
Level 7	Incline	1.5	2	3	3	2.5	2	2	2	2.5	3
	Speed	1.4	3.8	5	5.5	6	6.5	7	6.5	6	5.5
Level 8	Incline	1.5	2	3	3	2.5	2	2	2	2.5	3
	Speed	1.4	4.1	5.5	6	6.5	7	7.5	7	6.5	6
Level 9	Incline	2	2.5	3.5	3.5	3	2.5	2.5	2.5	3	3.5
	Speed	1.4	4.5	6	6.5	7	7.5	8	7.5	7	6.5
Level 10	Incline	2	2.5	3.5	3.5	3	2.5	2.5	2.5	3	3.5
	Speed	1.4	4.9	6.5	7	7.5	8	8.5	8	7.5	7



5) **HILL CLIMB:** Simulates a hill ascent and descent. This program helps tone muscle and improve cardiovascular ability.

**Incline changes and segments repeat every 30 seconds.**

Segment	Warm Up		1	2	3	4	5	6	7	8	9	10
Time	4:00 Mins		30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec
Level 1	0	0	1	1.5	2	2.5	3	3	2.5	2	1.5	1
Level 2	0	0	1.5	2	2.5	3	3.5	3.5	3	2.5	2	1.5
Level 3	0	1	2	2.5	3	3.5	4	4	3.5	3	2.5	2
Level 4	0	1.5	2.5	3	3.5	4	4.5	4.5	4	3.5	3	2.5
Level 5	0	1.5	3	3.5	4	4.5	5	5	4.5	4	3.5	3
Level 6	0	1.5	3.5	4	4.5	5	5.5	5.5	5	4.5	4	3.5
Level 7	0	1.5	4	4.5	5	5.5	6	6	5.5	5	4.5	4
Level 8	0	2	4.5	5	5.5	6	6.5	6.5	6	5.5	5	4.5
Level 9	0	2	5	5.5	6	6.5	7	7	6.5	6	5.5	5
Level 10	0	2	5.5	6	6.5	7	7.5	7.5	7	6.5	6	5.5



6) **TARGET HEART RATE:** This program is designed for you to improve your overall cardiovascular fitness levels. You simply set your target heart rate. The program will then monitor and adjust the intensity level to maintain your heart rate within your targeted range while you exercise – a proven method to maximize your weight loss and fitness goals. A chest strap is required and must be worn during the duration of this program. See below for calculating your target heart rate.

**Calculating Your Target Heart Rate**

The first step in knowing the right intensity for your training is to find out your maximum heart rate (max HR = 220 – your age). The age-based method provides an average statistical prediction of your max HR and is a good method for the majority of people, especially those new to heart rate training.

The most precise and accurate way of determining your individual max HR is to have it clinically tested by a cardiologist or exercise physiologist through the use of a maximal stress test. If you are over the age of 40, overweight, have been sedentary for several years, or have a history of heart disease in your family, clinical testing is recommended.

This chart gives examples of the heart rate range for a 30 year old exercising at 5 different heart rate zones. For example, a 30-year-old’s max HR is 220 – 30 = 190 bpm and 90% max HR is 190 × 0.9 = 171 bpm.

**Additional target heart rate notes:**

- 1). The treadmill incline will automatically adjust to bring you near your specified heart rate.
- 2). If there is no heart rate detected, the unit will not change the incline.
- 3). If your heart rate is 25 beats over your target zone the program will shut down.

Target Heart Rate Zone	Workout Duration	Example THR (age 30)	Your THR	Recommend For
<b>VERY HARD</b> 90 - 100%	< 5 min	171-190 BPM		Fit persons for athletic training
<b>HARD</b> 80 - 90%	2-10 min	152-171 BPM		Shorter Workouts
<b>MODERATE</b> 70 - 80%	10-40 min	133-152 BPM		Moderately long Workouts
<b>LIGHT</b> 60 - 70%	40-80 min	114-133 BPM		Longer and frequently repeated shorter exercises
<b>VERY LIGHT</b> 50 - 60%	20-40 min	104-114BPM		Weight management and active recovery

## CHAPTER 3: CONSOLE INSTRUCTION



7) **MY FIRST 5K:** This 9-week program is intended for inexperienced runners looking to run their first 5k or simply begin an exercise routine. It is designed specifically to keep you motivated and engaged, gradually building your strength, increasing your stamina and giving you the confidence it takes to complete your first 5k.

Week	Workout #1	Workout #2	Workout #3	Week	Workout #1	Workout #2	Workout #3		
1	5 minute warmup	5 minute warmup	5 minute warmup	4	5 minute warmup	5 minute warmup	5 minute warmup		
	1 min jog	1 min jog	1 min jog		3 minute jog	3 minute jog	3 minute jog		
	1.5 min walk	1.5 min walk	1.5 min walk		1.5 minute walk	1.5 minute walk	1.5 minute walk		
	1 min jog	1 min jog	1 min jog		5 minute jog	5 minute jog	5 minute jog		
	1.5 min walk	1.5 min walk	1.5 min walk		2.5 minute walk	2.5 minute walk	2.5 minute walk		
	1 min jog	1 min jog	1 min jog		3 minute jog	3 minute jog	3 minute jog		
	1.5 min walk	1.5 min walk	1.5 min walk		1.5 minute walk	1.5 minute walk	1.5 minute walk		
	1 min jog	1 min jog	1 min jog		5 minute jog	5 minute jog	5 minute jog		
	1.5 min walk	1.5 min walk	1.5 min walk		5 minute cooldown	5 minute cooldown	5 minute cooldown		
	1 min jog	1 min jog	1 min jog		5	5 minute warmup	5 minute warmup	5 minute warmup	
	1.5 min walk	1.5 min walk	1.5 min walk			5 minute jog	5 minute jog	5 minute jog	
	1 min jog	1 min jog	1 min jog			3 minute walk	3 minute walk	3 minute walk	
	1.5 min walk	1.5 min walk	1.5 min walk			5 minute jog	5 minute jog	5 minute jog	
	1 min jog	1 min jog	1 min jog			3 minute walk	3 minute walk	3 minute walk	
	1.5 min walk	1.5 min walk	1.5 min walk			5 minute jog	5 minute jog	5 minute jog	
	1 min jog	1 min jog	1 min jog			5 minute cooldown	5 minute cooldown	5 minute cooldown	
	1.5 min walk	1.5 min walk	1.5 min walk			6	5 minute warmup	5 minute warmup	5 minute warmup
5 minute cooldown	5 minute cooldown	5 minute cooldown	5 minute jog	10 minute jog	25 minute jog				
2	5 minute warmup	5 minute warmup	5 minute warmup	3 minute walk	3 minute walk		5 minute cooldown		
	1.5 minute jog	1.5 minute jog	1.5 minute jog	8 minute jog	10 minute jog				
	2 minute walk	2 minute walk	2 minute walk	3 minute walk	5 minute cooldown				
	1.5 minute jog	1.5 minute jog	1.5 minute jog	5 minute jog					
	2 minute walk	2 minute walk	2 minute walk	5 minute cooldown					
	1.5 minute jog	1.5 minute jog	1.5 minute jog	7	5 minute warmup		5 minute warmup	5 minute warmup	
	2 minute walk	2 minute walk	2 minute walk		25 minute jog	25 minute jog	25 minute jog		
	1.5 minute jog	1.5 minute jog	1.5 minute jog		5 minute cooldown	5 minute cooldown	5 minute cooldown		
	2 minute walk	2 minute walk	2 minute walk		8	5 minute warmup	5 minute warmup	5 minute warmup	
	1.5 minute jog	1.5 minute jog	1.5 minute jog			28 minute jog	28 minute jog	28 minute jog	
	2 minute walk	2 minute walk	2 minute walk			5 minute cooldown	5 minute cooldown	5 minute cooldown	
	5 minute cooldown	5 minute cooldown	5 minute cooldown			9	5 minute warmup	5 minute warmup	5 minute warmup
	3	5 minute warmup	5 minute warmup				5 minute warmup	30 minute jog	30 minute jog
		1.5 minute jog	1.5 minute jog	1.5 minute jog			5 minute cooldown	5 minute cooldown	5 minute cooldown
		1.5 minute walk	1.5 minute walk	1.5 minute walk			Warmup and cooldown speeds 1.0 mph or 75% of walk speed, whichever is greater		
		3 minute jog	3 minute jog	3 minute jog					
		3 minute walk	3 minute walk	3 minute walk					
1.5 minute jog		1.5 minute jog	1.5 minute jog						
1.5 minute walk		1.5 minute walk	1.5 minute walk						
3 minute jog		3 minute jog	3 minute jog						
3 minute walk		3 minute walk	3 minute walk						
5 minute cooldown		5 minute cooldown	5 minute cooldown						

Warmup and cooldown speeds 1.0 mph or 75% of walk speed, whichever is greater



8) **CUSTOM:** Allows you to create and reuse your perfect workout with a combination of a specific speed, incline and time or distance. The ultimate in personal programming. This is a time or distance based goal program.









## CHAPTER 4: ENGINEERING MODE

### 4.1 ENGINEERING MODE


To enter Engineering Mode, press and hold the incline quick key 15 and speed quick key 12 for 3 to 5 seconds.

ENG No	Function	Sub Function		Operation	Display show as
0	Display test	0	Ready	Press incline 15 and speed 12 at the same time for 3 seconds	
		1	All key light up	Press "Push to select"	
		2	All key light off	Press "stop"	
		Escape	Escape present function	Press "stop" 3 seconds	
1	Hardware test	0	Ready	Clockwise rotate "push to select" to enter ENG1	
		2	MAC address	Press "push to select" to enter	
		3	BT device	Press "push to select" to enter	
		Escape	Escape present function	Press "stop" 3 seconds	

CHAPTER 4: ENGINEERING MODE

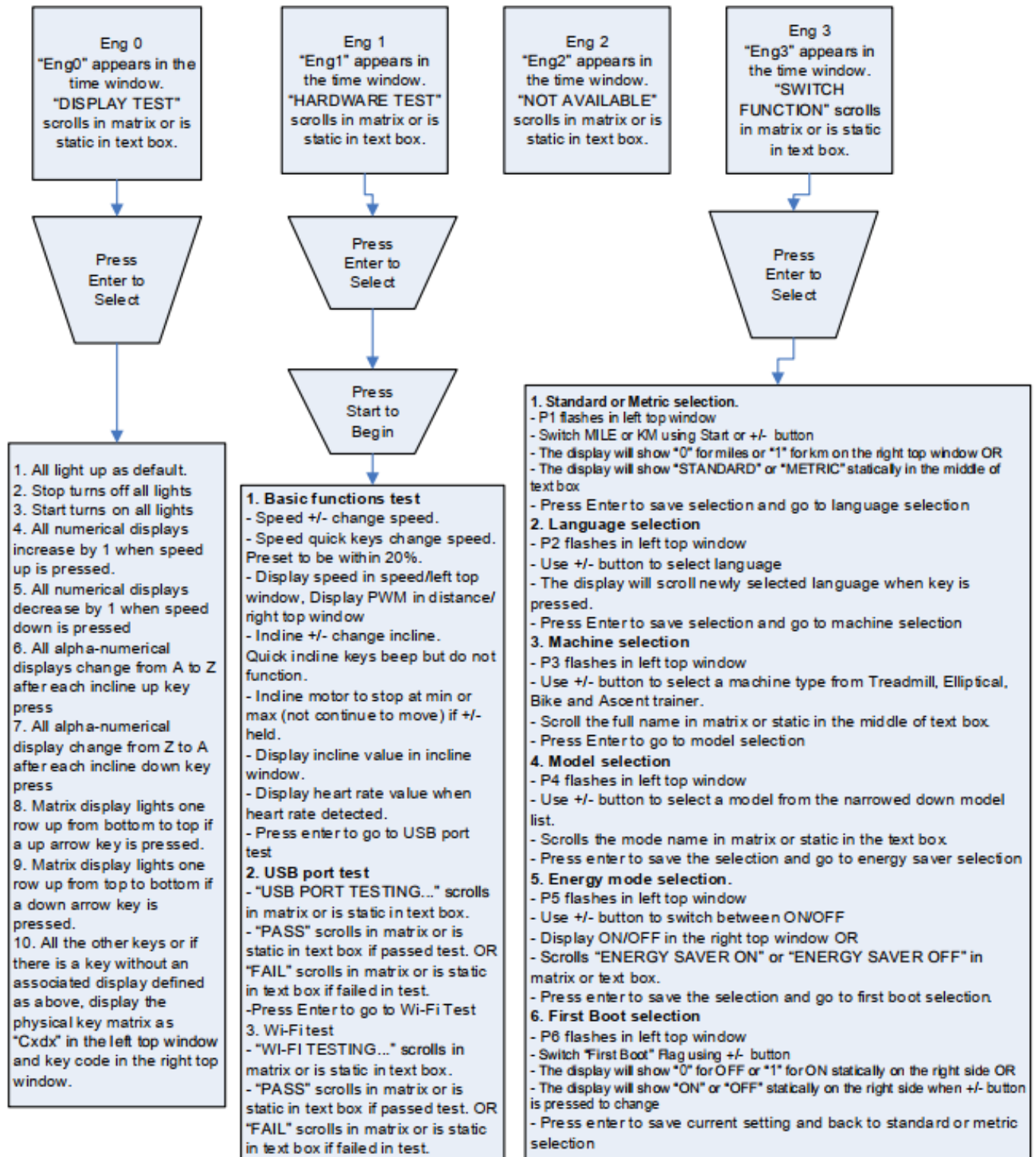
2	No defined function		Not function	Clockwise rotate “push to select” to enter Press “stop” 3 seconds to escape present function	
3	Switch function	0	Ready	Clockwise rotate “push to select” to enter ENG3	
		1	Energy save on	Press “push to select” to enter	
		2	Boot off (reset all Parameter)	Press “push to select” to enter	
		3	Unit change mile/Km (press “stop” 3 seconds to save)	Press “push to select” to enter	
		Escape	Escape present function	Press “stop” 3 seconds	
4	Information	0	Ready	Clockwise rotate “push to select” to enter ENG4	
		1	Accumulated information (distance and time)	Press “push to select” to enter	
		2	UCB version	Press “push to select” to enter	

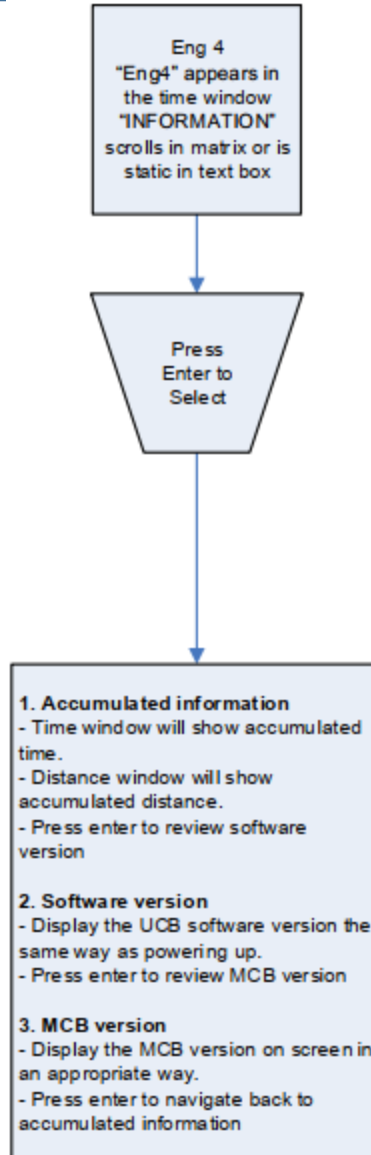
## CHAPTER 4: ENGINEERING MODE

		3	MCB version	Press "push to select" to enter	
		Escape	Escape present function	Press "stop" 3 seconds	



4.2 ENGINEERING MODE OVERVIEW



**Note:**

1. USB port testing is only for the consoles which have USB interface.
2. First Boot flag is only used for consoles which work for different machine and/or model types.
3. A text box must be implemented when multi language is available.
4. Console goes to model selection after cycling the power when First Boot flag is set to ON.
5. If there is conflict between process number "Px" and other display items, the process number will only display for 1 second and then display the real items.
6. Display items alternatively when a few items needs to be displayed in the same window. Light up the indicator if the indicator exists.
7. A text box or LED/LCD matrix is needed if the console work for different machine and/or model types.
8. The console will automatically connect to SSID: "JIS FQC TEST" with password "quality" .



## CHAPTER 5: TROUBLESHOOTING

### 5.1 WIRING SCHEMATIC

#### 7.0AT-04 CONSOLE WIRE CONNECTION SCHEMATIC V1.0

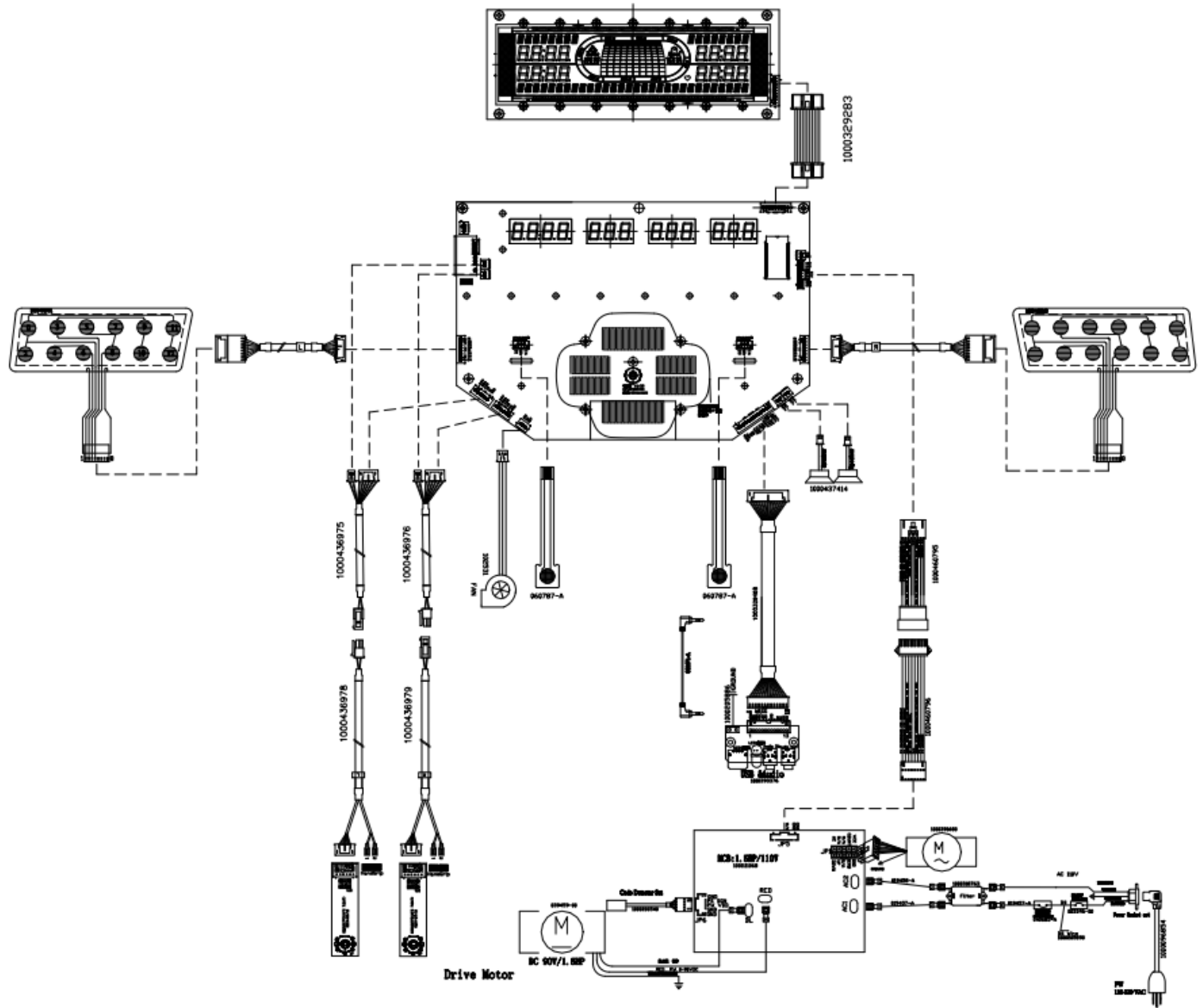


Fig-1 : The CN4 MCB TO Console Pin layout

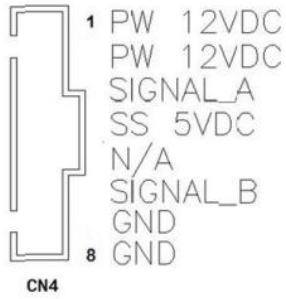


Fig-2 The JP6 Speed sensor to MCB pinlayout

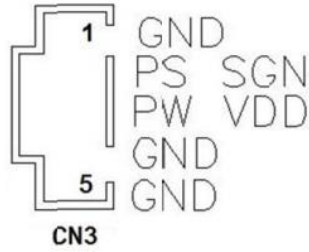


Fig-3 The JP1 MCB To Inline Pin location

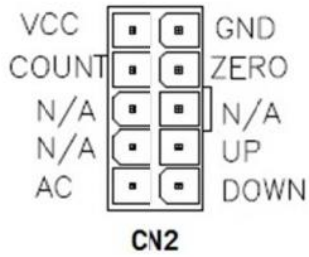


Fig-4 The Voltage range instruction

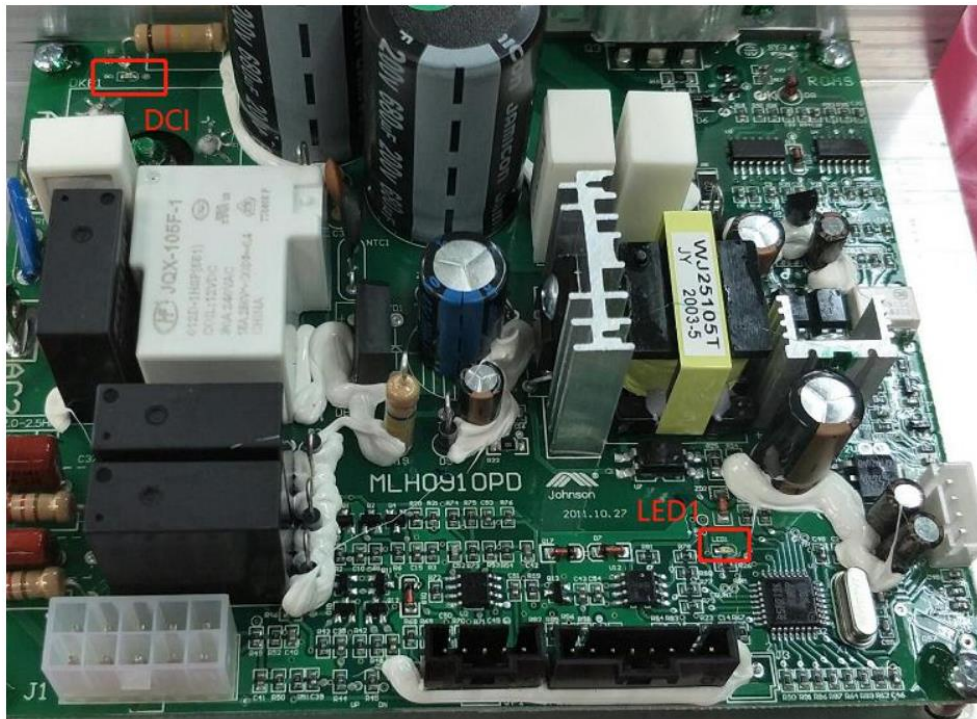
PW 110–120VAC:Power
PW 12VDC: POWER 12V DC
PW 5VDC : POWER 5V DC
PS 3.3VDC : PULSE SIGNAL 0 OR 3.3V DC
SS 5VDC : SWITCH SIGNAL 0 OR 5V DC

5.2 MCB WIRING INSTRUCTIONS



CN1	Power Line
CN2	Incline motor power cable
CN3	Speed sensor cable
CN4	Console set cable
CN5	Software burning cable
CN6	Drive motor cable

MCB LED Configuration



## CHAPTER 5: TROUBLESHOOTING

**Table 1**

LED No	Color	Active	Inactive	Function	Symptom
DCI	Red	Light on	Light off	Drive Motor active	No voltage to drive motor
LED1	Green	flash	-----	MCU status see Table 2	See table 2

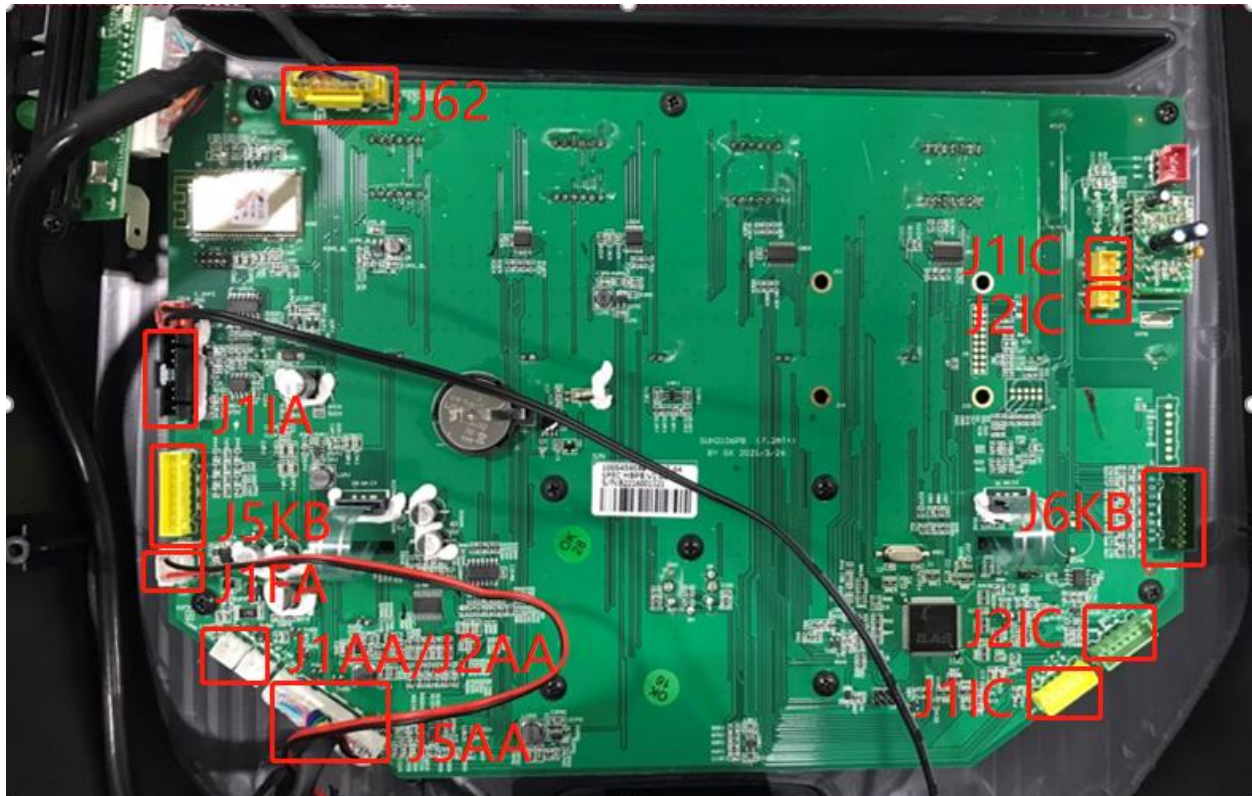
**Table 2**

LED Flash Times	Status	Action Condition	Failure Parts
1	Normal	Flashing 1 time per second regularly. The CPU works well	
2	No Feedback from the optical encoder	1)There is no optical encoder signal over 4 seconds on low speed (less than 4 miles) 2)There is no optical encoder signal over 1 second on high speed (more than 4 miles)	The encoder is failed or poor connecting
3	Overload/overcurrent	The DC motor current is over the rated current and keep for 4 seconds	The motor is over loaded
4	Overspeed	The motor control device is failed, or the accelerated speed is too fast	MOSFET (IGBT) is damaged
5	Being rapidly stopped	The safe key is off	
6	No incline action	Incline motor is bock, there is no count signal feedback in the movement	The incline motor control device (relay) is failed, or the incline motor is overheat protection.
7	Communication abnormal by AURT	No communication with console, or not obey the communication protocal	The uart circuit is failed, or the connection line is damaged
8	No incline motor	Can't find ZERO signal of the incline motor	There is no incline motor connected or the zero switch is damaged

## CHAPTER 5: TROUBLESHOOTING

Console Circuit Board Instruction:

J62	To LCD display
J1IC	From hear rate grip (left)
J2IC	From hear rate grip (right)
J2KB	From Quick key Left hand bar
J3KB	From Quick key Right hand bar
J1IA	To MCB
J5AA	To Audio In & Out interface
J1AA/J2AA	To Speaker
J1FA	To Fan
J5KB	To Keypad (left)
J6KB	To Keypad (right)





## 5.3 TROUBLESHOOTING SUMMARY

Code	Description	Symptom	Solution
1	NO POWER TO THE CONSOLE	Turn on the power switch, but the console will no light up	See section 5.4
2	NO FUNCTIN FOR SAFETY KEY	The safety key inserted in console, but display window still shows “safety key off”	See section 5.5
3	NO RESPONSE FOR MACHINE (CONSOLE & MOTOR)	The power is on and the console lights up, but the treadmill does not run when keys are pressed	See section 5.6
4	INCLINE MOTOR ISSUES	The incline motor does not lift up or down	See section 5.7
5	NOISE ISSUES	The machine has abnormal noise when the treadmill is on.	See section 5.8
6	SPEAKER / AUDIO ISSUES	<ol style="list-style-type: none"> <li>1.No sound through the speakers but headphones works.</li> <li>2. No sound through headphones but the speakers work.</li> <li>3. No sound through speakers or headphones</li> <li>4. Device not charging</li> <li>5. Speakers buzzing</li> <li>6. Sound from one speaker only</li> <li>7. Shock from headphones</li> </ol>	See section 5.9
7	HEART RATE FUNCTION ISSUE	<ol style="list-style-type: none"> <li>1.The chest strap being used is not making good contact with the user’s chest.</li> <li>2.The chest strap is at a low battery status</li> <li>3.The chest strap is damaged</li> <li>4.The HR grips are damaged</li> <li>5. Heart rate board damaged</li> <li>6. The UCB is damaged</li> </ol>	See section 5.10
8	BLUETOOTH ISSUE	<ol style="list-style-type: none"> <li>1.Bluetooth light cannot turn on</li> <li>2.Bluetooth can not connect to external device</li> </ol>	See section 5.11

## 5.4 NO POWER TO THE CONSOLE

**Preliminary Solution:**

- A. Check circuit breaker, reset if necessary.(Fig-1)
  - B. Check if the outlet is well. - If no, please try another functional outlet.
  - C. Check if the power cord connected well.
- If the power cord connected well but console doesn't turn on, try another one.

**Further Solution:**

- A. Check if the MCB has power. There is a green LED in red area should flash.



- B. If the MCB does not have power, check the connection of the power wiring from the power receptacle to the MCB. Use a multi-meter to measure CN1 (AC1 & AC2) –see Page10 Fig-1, AC vol age shall be same as local's standard voltage (110V/120V)
  - If AC voltage value is standard, replace the MCB as it shall be defective.
- C. If the MCB does have power, check the connection of the console cable wire at the MCB and UCB.
  - Remove the console cable CN4 from MCB (section 5.2), and use a multi-meter to measure the DC voltage between the "GND pin" (Pin 8) and the" + 12V Pin" (Pin1). DC output is normally around DC 12V. If no output, replace the MCB.
  - If output is around DC 12V, check the console cable. If it is defective, replace the console cable.
  - If the console cable connections are all good, replace the UCB.

## 5.5 NO FUNCTION FOR SAFETY KEY

### **SOLUTION:**

- A. Check if the safety key is totally inserted into the console.
  - If not, remove and insert again.
- B. Check if the safety key is oxidized or its condition does not affect its function.
  - If yes, try cleaning it or replace it.
- C. If the safety key is functional, check the safety key sensor wires in console.
  - Suggest to re-connect the wires or to change new wires.



## 5.6 NO RESPONSE FOR MACHINE (CONSOLE & MOTOR)

### **SOLUTION:**

A. Check if the console beeps when all keys are pressed. If no, replace the keypads.

B. Enter Engineering Mode, and scroll to ENG 1 (Hardware Test). Press the key "ENTER" first and then the key "START".

- When press the key "SPEED + / -", if the data on windows "TIME" & "DISTANCE" is changed, the console is

ok. If not, replace the PCB.

C. Turn off the power switch, and open the motor upper cover. Remove the red & black wires of motor from the

MCB, and use a multi-meter to measure the resistance of drive motor.

- If the resistance is bigger than  $10 \Omega$ , the drive motor is defective. Replace the drive motor.

- If the resistance is lower than  $10 \Omega$ , the drive motor is ok. Then,

- Check the connection of the speed sensor (encoder disk group) at the MCB.

- Remove the speed sensor from the motor and clean it, then re-test.

- If the speed sensor is clean and has a good connection but still will not operate, replace the speed sensor.

- Replace the MCB as the last step if machine still does not run after taking above actions.

5.7 INCLINE MOTOR ISSUES:

**SOLUTION:**

- A. Press the "INCLINE" keys, the console should beep and display incline change, if no, replace the key pad.
- B. Enter Engineering Mode, and scroll to ENG 1 (Hardware Test). Press the "push to select" key first and then the "START" key.
- C. Roll forward/backward to increase/decrease incline the "Incline scroll wheel".
  - If can hear clicks from two relays at the MCB, the MCB is ok. Then check the connection of the elevation motor at the MCB first, try to unplug and re-plug. If this does not resolve the issue, replace the elevation motor.
  - If there is no clicks from these two relays, MCB is defective and replace the MCB.

## 5.8 NOISE ISSUES

### **SOLUTION:**

**A.** Humping noise twice per rotation on new machine.

Solution: This noise is from the roller or running belt.

- If this is a new unit, some noise is normal as the running belt forms around the rollers.
- Check that the belt is centered and tensioned correctly.
- Remove and clean the rollers if needed.
- Replace the rollers or running belt as needed.

**B.** High pitched “bell-like” sound from under the motor cover.

Solution: This sound is likely a moving component.

- Remove the motor cover and check the drive belt for alignment and make sure it is not slipping or is frayed / cut in any way. Replace the drive belt if needed.
- Make sure the optic disk on the motor is not rubbing the speed sensor.
- Turn the motor by hand to see if motor brushes or bearings are rubbing. Replace the motor if needed.
- Check the front and rear rollers, replace if needed.

**C.** Rubbing / grinding noise.

Solution: This sound is likely caused by the optic disk.

- Check that the optic disk is tight on the motor and not rubbing the speed sensor.

**D.** Banging or clunking sound/5. Slapping / thinking / squeaking sound with Each footstep.

Solution: The sound is likely due to the unit not being level.

- Check that all levelers are touching the ground.
- Move the treadmill to another flat surface.
- This sound is from the running deck / belt.
- Check that the running deck is tightly attached to the frame.
- Check the deck shocks for denigration or crumbling. Replace if needed.
- Check to see if the air shock is making this noise, lubricate or replace if needed.

**E.** Rubbing sound underneath the treadmill.

Solution: This sound is likely due to the air shock.

- Lubricate or replace the air shock as needed.

**F.** Squeaking / grinding noise when using elevation.

Solution: This sound is likely from the incline motor.

- Check that the incline motor connection points include Teflon washers.
- Lubricate the incline motor worm screw and connection points with grease.
- Replace the incline motor.

## 5.9 SPEAKER / AUDIO ISSUE

**SOLUTION:**

A. One of the speaker boards has a bad connection or is faulty.

- Check the connection of the wires going from the speakers to the speaker power board.
- Check the connection of the wires going from the speaker power board to the amp board.
- Check the connection of the wires going from the amp board to the console.
- Replace the speaker or amp boards and wiring.
- Replace the speakers.
- If the speaker board, amp board, wiring, and speakers do not solve the issue, replace the console.

B. There is a bad connection between the headphones and the console.

- Verify the connection of the music player to the dock or audio adaptor cable.
- Verify the audio adaptor cable connection at the console.
- Replace the headphone jack.
- Replace the audio adaptor cable.

C. There is a bad connection between one of the audio boards and the console.

- Verify the connection of the music player to the dock or audio adaptor cable.
- Verify the audio adaptor cable connection at the console.
- Replace the audio adaptor cable.
- Replace the console.

D. Speakers are not getting a clear signal through the speaker wires.

- Check the speaker wire connections.
- Replace the speaker wiring.
- Replace the speakers.

E. The speaker or speaker wiring is bad.

- Check the speaker wire connections.
- Switch the speaker connections from one speaker to the other to see if sound switches sides.
- If the sound does not switch sides, replace the speaker board.
- If the sound does switch sides, replace the speaker and speaker wires.

F. Grounding issue.

- Try a different set of headphones.
- Check the grounding of the console.

## 5.10 HEART RATE FUNCTION ISSUE

### **SOLUTION:**

A. Re-center the chest strap below the user's pectoral muscle and check again.

B. Replace the battery in the chest strap.

C. Wet the user's hand, and then re-establish contact with the HR grip.

D. Replace new HR grip if console can display proper HR rate.

With a multi-meter set for DC voltage, place one terminal on each of the HR grip plates. The HR Grip should give a voltage reading of between 0.5 and 2.0VDC. If the voltage is not between 0.5 and 2.0VDC, remove the screws holding the HR grip together and check the connection of the HR grip wiring.

E. Check a-d. If still cannot work, Suggest install new console.

5.11 BLUETOOTH PAIRING ISSUE

**SOLUTION:**

A. Press Bluetooth button see if blue light on.(Fig-1)

- If not the Bluetooth may damage. Replace console circuit board.



Fig-1

B. Unpaired the others device. Try to connect Bluetooth in external mobile device (Only for audio play)

- If cannot see the device name is your mobile screen” 7.0AT SPEAKERS XXXX “ (Fig-2), The Bluetooth may be damaged. Replace console circuit board.

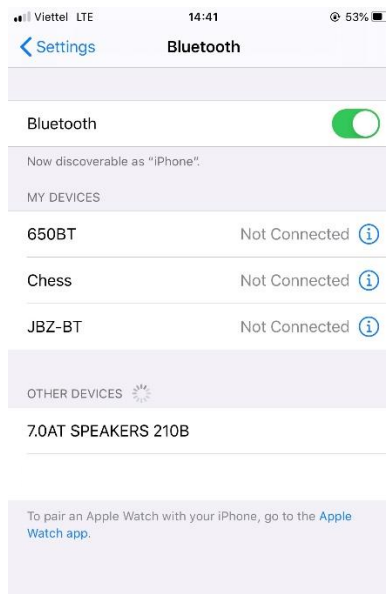


Fig-2

## CHAPTER 6: PART REPLACEMENT GUIDE

## 6.1 MOTOR REPLACEMENT

- 1) Disconnect power cord.
- 2) Remove the 2 screws holding the motor cover to the frame (Fig-1)
- 3) The cover is secured to the frame. So you will have to pull up with some force (Fig-2)



Fig-1



Fig-2

- 4) shows the motor area with the motor cover removed.(Fig-3)



Fig-3

- 5) Reverse Steps 1-3 to install a new motor cover.
- 6) Confirm drive belt tension is correct after replacing motor (see section 6.5)
- 7) Unplug the motor connector from LCB, speed sensor, cut any wire ties as needed.
- 8) Remove drive belt by walking belt off as moving running belt and pushing a side drive belt.
- 9) Remove the four motor bolts and remove motor.
- 10) To re-install motor, tilt motor towards front roller with motor base plate on front mounting studs. Place drive belt on front roller and motor pulley. With force, draw the motor back, firmly stabilizing the motor from slipping off mounting studs. Then fix mounting bolts.
- 11) Reverse steps 1-4 to complete. Replace any wire ties removed.
- 12) Test at various speeds.

## 6.2 REAR ROLLER REPLACEMENT

- 1) Remove the 4 screws from the rear end caps, remove rear end caps.(Fig-1)
- 2) Remove roller adjustments bolts on both sides, approximately 4-5 turns per side until bolts are removed. (Fig-2)



Fig-1



Fig-2

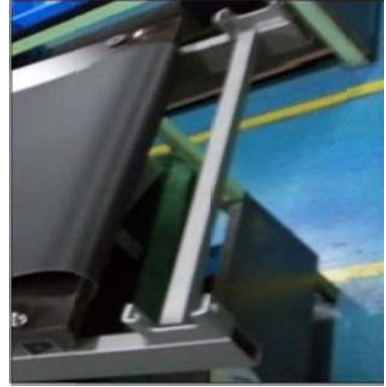


Fig-3

- 3) Remove the rear roller (Fig-3)
- 4) Reverse steps to install rear roller .

### **Note:**

1. Be sure to set the correct running belt tension after replacing the roller.
  2. Over or under tension will result in damage or injury.
- For the adjusting the running belt reference section 6.6 note 2.



### 6.3 SIDE RAIL REPLACEMENT

- 1) Remove the rear end cap (Fig-1). See section 6.2
- 2) Slide the rail off the treadmill (Fig-2).



Fig-1



Fig-2

- 3) Reverse Steps 1-2 to install a new side rail.

**Note:**

After re-installing the side rail, make sure the rear end cap is on first before tightening the screws for proper gap spacing. Be careful not to over tighten the screws, or they will poke through the top of the side rail.

#### 6.4 RUNNING DECK REPLACEMENT

- 1) Remove the motor cover as outlined in Section 6.1.
- 2) Remove rear roller as outlined in section 6.2
- 3) Remove the side rail as outline in Section 6.3.
- 4) Remove the running deck 8 bolts and ground strap.
- 5) Remove the running deck from the frame.(Fig-1)
- 6) Reverse steps 1-5 to install a new running deck.

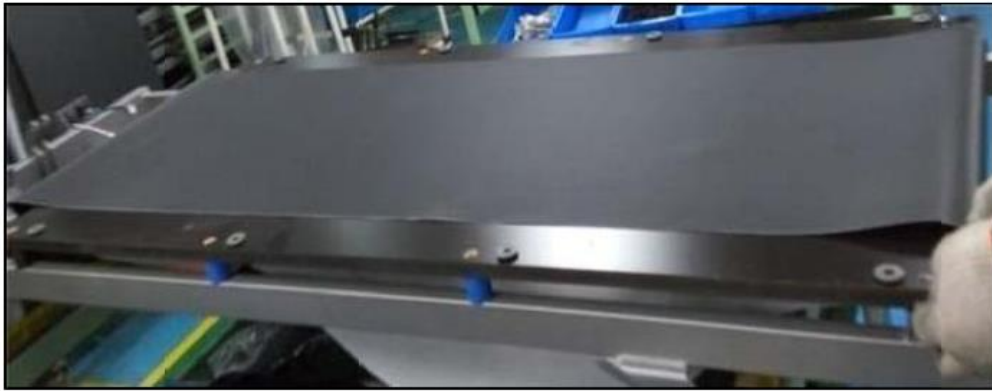


Fig-1

**Note:**

1.The running deck has silicon on one side. New deck surfaces must **ALWAYS** be matched to a new running belt.

For the ADJUSTING THE RUNNING BELT reference section 6.6 note 2.

## 6.5 FRONT ROLLER REPLACEMENT

- 1) Remove the motor cover as outlined in Section 6.1.
- 2) Remove both of the rear roller screws to remove tension from the running belt.(Fig-1)



Fig-1

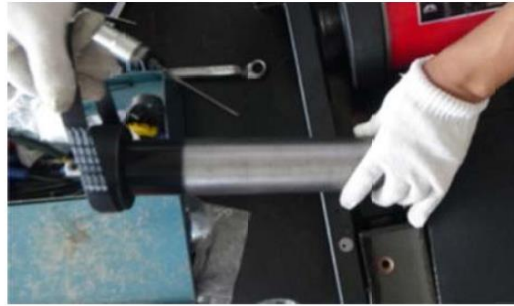


Fig-2

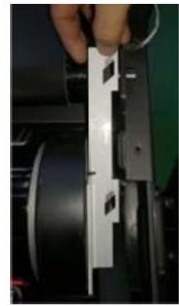


Fig-3

- 3) Remove the drive belt from the front roller and remove the roller from the running belt.(Fig-2)
- 4) Replace new Front roller and motor drive belt, and check belt alignment with alignment Jig (Fig-3) ,the specification is <math><1.5\text{mm}</math>.
- 5) Check belt tension with equipment.(Fig-4)



Fig-4

(Belt tension: 275~330Hz)

## 6.6 RUNNING BELT REPLACEMENT

- 1) Remove the motor cover as outlined in Section 6.1.
- 2) Remove the rear roller as outlined in Section 6.2.
- 3) Remove the running deck as outlined in Section 6.4.
- 4) Remove the front roller as outlined in Section 6.5.
- 5) Remove the running belt.



Fig-1



Fig-2

- 6) Reverse Steps 1-5 to install a running belt. (Fig-1 & Fig-2)

### Note1:

1. Adjust running belt tension after replacement (Note2)
2. The running deck is silicon on one side. New deck surfaces must ALWAYS be matched to a new running belt.

### Note2:

#### ADJUSTING THE RUNNING BELT

After placing the treadmill in the position it will be used, the belt must be checked for proper tension and centering. The belt may need to be adjusted after the first 2 hours of use. Temperature and humidity, and use cause the belt to stretch at different rates. If the belt starts to slip when a user is on it, be sure to follow the direction below.

**Step1:** Locate the two hex head bolt on the rear of the treadmill. The bolts are located at each end of the frame at the back of treadmill. These bolts adjust the rear roller. Do not adjust until the treadmill is on. This will prevent over tightening of one side.

**Step2:** The belt should have equal distance on either side between the frames. If the belt is touching one side, do not start the treadmill. Turn the bolts counter clockwise approximately one full turn on each side. Manually center the belt by pushing the belt from side to side. Tighten the bolts the same amount as when the user loosened them, approximately one full turn. Inspect the belt for damage.

**Step3:** While the treadmill is running at 3 mph, observe the belt position. If it is moving to the right, tighten the Right bolt by turning it clockwise 1/4 turns, and loosen the left bolt 1/4 turn. If it is moving to the left, tighten the left bolt by turning it clockwise 1/4 turn and loosen the right 1/4 turn. Repeat step 3 until the belt remains centered for several minutes.

**Step4:** Check the tension of the belt. The belt should be very snug. When a person walks or run on the belt, it should not hesitate or slip. If this occurs, tighten the belt by turning both bolts clockwise 1/4 turn, Repeat if necessary.

### 6.7 MOTOR CONTROL BOARD (MCB) REPLACEMENT

- 1) Turn off power and disconnect the cord from the machine.
- 2) Remove the motor cover as outlined in Section 6.1.
- 3) Disconnect the wire connectors at the MCB. (Fig-1)
- 4) Remove the 2 screws holding each side of the MCB to the frame .

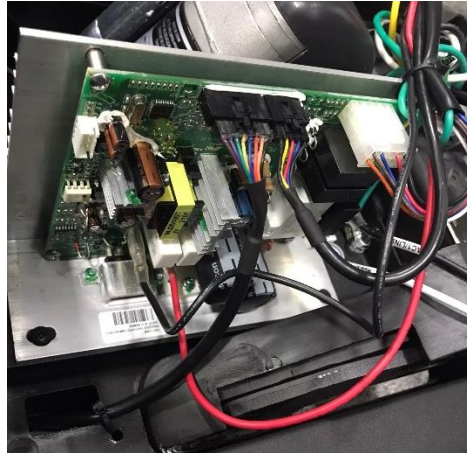


Fig-1

- 5) Remove the MCB.
- 6) Reverse Steps 1-5 to install a new MCB. Make sure that all wires removed during Step 3 are re-connected.

**Note:**

Replace any wire ties removed.

## 6.8 INCLINE MOTOR REPLACEMENT

- 1) Turn off power to the treadmill and disconnect the power cord.
- 2) Remove the motor cover as outlined in Section 6.1
- 3) Lift the treadmill and support it so that the front wheels are off the floor.
- 4) Remove the screws from the elevation rack (Fig-1&2)



Fig-1

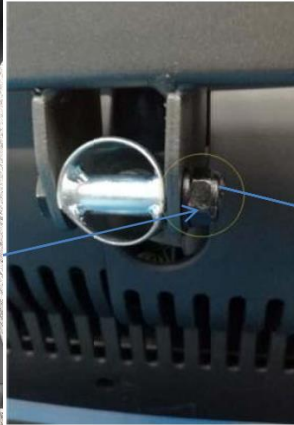


Fig-2



Fig-3

- 5) Disconnect the incline motor from the top mounting bracket. (Fig-3)
- 6) Reverse Steps 1-5 to install a new incline motor.
- 7) Test full range of elevation.

**Note:** When installing a new incline motor, make sure to replace the white nylon washers at the top and bottom connection points of the incline motor.

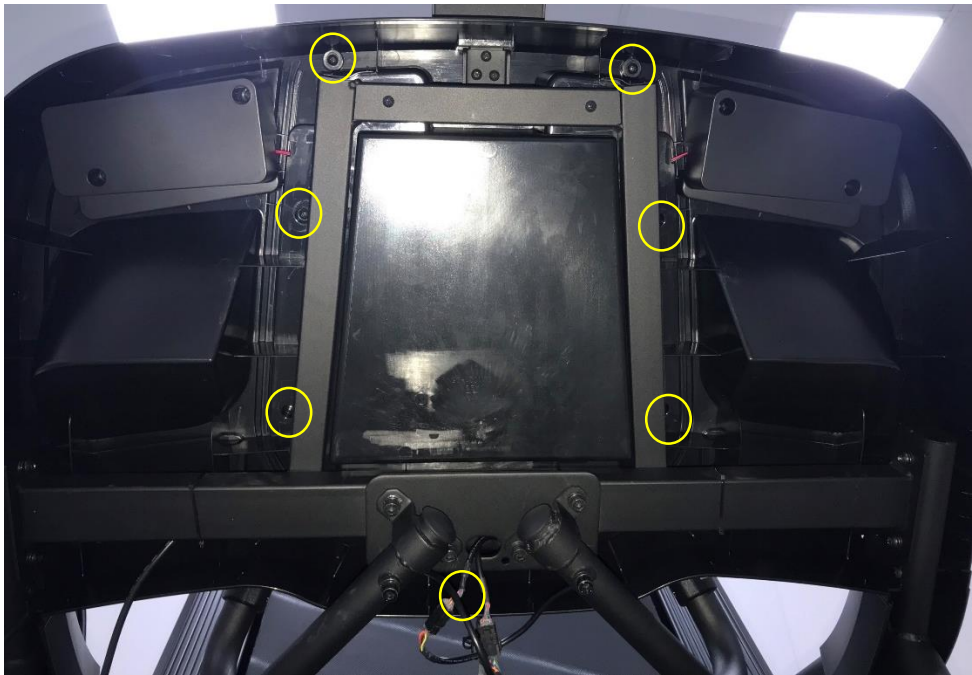


## 6.9 CONSOLE OVERLAY SET REPLACEMENT

1) Unplug the unit from the wall.



2) Remove the screws (circled in yellow) from the back of the console that hold the front window in place. Make sure to keep the screws.



3) Open the front of the console overlay.



4) Take photos of the UCB and wire connections so that you can reference them when you are plugging the wires into the new board.



5) Disconnect all of the wires from the board.

6) Remove the old console overlay set and put the new one in place. Refer to your photos to correctly reconnect the wires.

7) Plug the unit into the wall and check for proper function.

- a. Check the Go button
- b. Check elevation up & down
- c. Verify speed up & down
- d. Make sure heart rate works
- e. Check the Stop button
- f. Remove the safety key – the display should show that safety key is removed

8) If the unit is functioning properly, reinstall the screws in the back of the console to secure the front window.



## 6.10 CONSOLE CIRCUIT BOARD REPLACEMENT

- 1) Confirm wearing good contact ESD wrist strap.
- 2) Remove console set as outlined in section 6.9.(Fig-1&Fig-2)
- 3) Replace the new circuit board.(Fig-3)
- 4) Reserve step 2-3



Fig-1



Fig-2

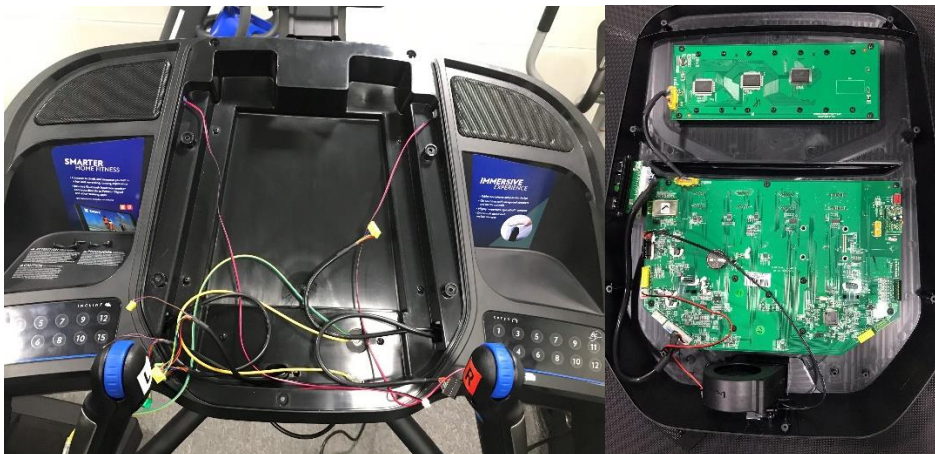


Fig-3

**Note:**

If electrostatic discharge (ESD) occurs during circuit board replacement, it can cause damage to the board. You are required to wear an ESD wrist strap during this replacement process in order to prevent ESD.

### 6.11 HEART RATE GRIP AND KEYPAD REPLACEMENT

- 1) Remove all of 4 pcs bolts and connection wire (Fig-1)
- 2) Remove heart rate grip bars (Fig-2)



Fig-1



Fig-2

- 3) Remove 2 bolts on heat rate bar and open the housing (Fig-3)



Fig-3

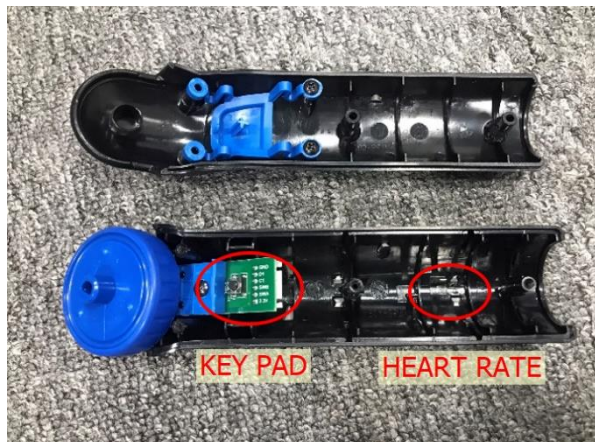


Fig-4

- 4) Remove keypad or heart rate connection wire. (Fig-4)
- 5) Replace keypad and overlay or heart rate plated. (Fig-4)
- 6) Reserve step 1-4.
- 7) Turn on power and check keypad and heart rate function.