

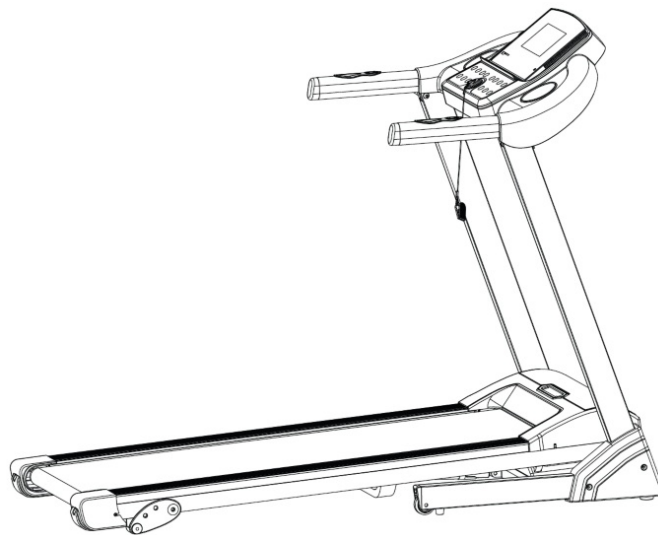


# FRONTIER FRB210 Treadmill Running Exercise Machine User Manual

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# FRONTIER

FRB210  
USER MANUAL



**Read this Manual carefully before use**

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## WARNING!

Read all instructions carefully before using this product. Retain this manual for future reference:

- When using this treadmill, keep attaching the safety pull pin rope to your clothes.
- When you are running, keep your hand swinging natural, stare forward, never look down at your feet.
- Add the speed step by step when running.
- When an emergency happens, take away the “emergent stop button” immediately.
- Leave the treadmill after the running belt stop stably.

**Caution:** Read the assembly instruction carefully, follow the instruction when assembling.

## IMPORTANT SAFETY PRECAUTIONS

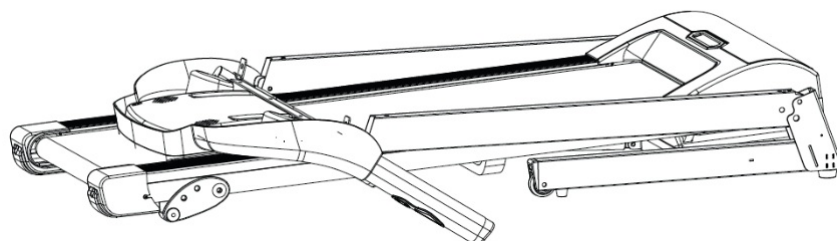
1. Before starting any exercise program, consult with your physician or health professional. To prevent injuries, warm-up before exercise. The treadmill is intended for adults only.
2. Check to ensure that all the bolts are locked.
3. Never put the treadmill in a wet/damp environment.
4. In order to prolong the life of this product, it is important to carry out continual maintenance.
5. **WARNING:** To avoid electric shocks, always unplug the machine before cleaning or service.
6. Never place the treadmill on a thick carpet to avoid damage to both carpet and product.
7. Be sure to have at least a 1-meter distance to the nearest fixed object.
8. Never let small children use or be near the treadmill.
9. Keep your hands away from all moving parts.
10. Do not use the product if the electrical cord is damaged.
11. Keep the cord away from all warm surfaces (for example radiators)
12. This treadmill is intended for home use and is therefore not adapted to professional use.
13. Never disconnect the electrical cord when the belt is in motion.
14. Recommended temperature for use is 5-40 °C.
15. Cut off the power when the equipment is not used. When the power is cut off, do not pull the power cord to keep the wire unbroken.
16. Maximum weight of user: 100KGS.

17. Plug the power cord of the treadmill directly into a dedicated grounded circuit.
18. Position the treadmill on a clear, level surface. Do not place the treadmill on thick carpet as it may interfere with proper ventilation. Do not place the treadmill near water or outdoors.
19. Never start the treadmill while you are standing on the belt. After turning the power on and adjusting the speed control, there may be a pause before the walking belt begins to move, always stand on the foot rails on the sides of the frame until the belt is moving.
20. Wear appropriate clothing when exercising on the treadmill. Do not wear long, loose-fitting clothing that may be caught in the treadmill. Always wear running or aerobic shoes with rubber soles.
21. Make sure the power supply is connected and the safety lock is effective before using the treadmill. Fit one side of the safety lock on the treadmill and clip the other side on your clothes or belt, which will enable you to pull off the safety lock promptly in an emergency.
22. Always hold the handrails when initially walking or running on the treadmill, until you are comfortable with the use of the treadmill.
23. Always attach the safety pull pin rope to your clothing when using the treadmill. If the treadmill should suddenly increase in speed due to an electronics failure or the speed being inadvertently increased, the treadmill will come to a sudden stop when the pull pin is disengaged from the console.
24. In case of any abnormality during the use process, please remove the safety lock immediately, grasp the handlebar and jump onto the two edgings, then get off the treadmill after it stops.
25. When the treadmill is not being used, the power cord should be unplugged, and the safety pull pin removed.
26. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
27. Make sure the treadmill has stopped before folding. Please don't operate it after folding the treadmill.

## **Assembly**

### **Step 1:**

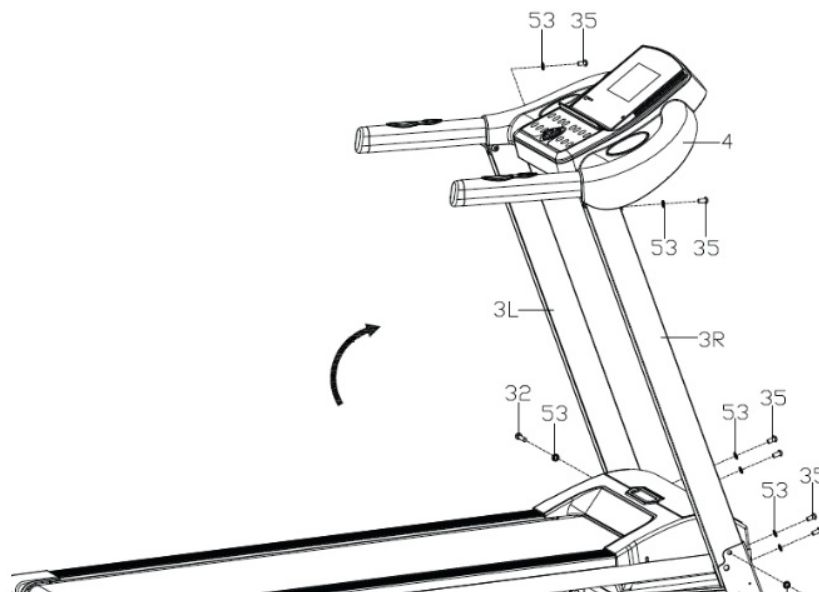
1. Open the package, take out all parts and place the mainframe combining on the flat ground.  
(DO NOT CUT OFF THE PACKING STRAPS yet)



### **Step 2:**

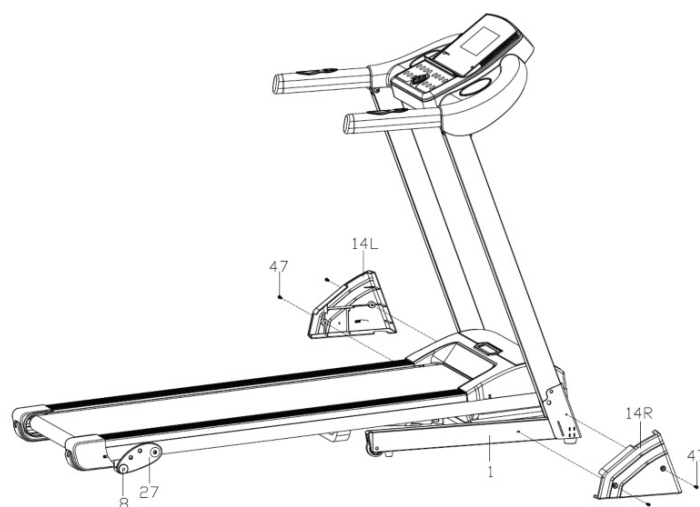
1. Cut down the straps when the mainframe was a place well (NOTE: Don't move it anymore)
2. Lift the combining of the upright tube (3L/R), and computer frame (4) following the direction of the arrow as shown.
3. Lock the upright tube (3L/R) on the bottom frame (1) with the Allen bolt (32), Allen bolt (35) and lock washer (53). DO NOT TIGHTEN THE TWO ALLEN BOLTS NOW.
4. Lock the computer frame (4) tightly on the upright tube (3L/R) with Allen bolt (35) and lock the washer (53).

NOW TIGHTEN ALL THE BOLTS.



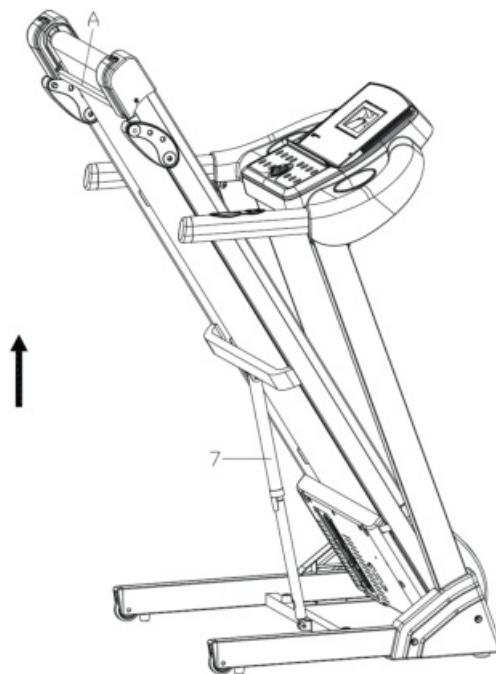
### Step 3:

1. Attach the base cover (14L/R) to the bottom frame (1), secured with the cross-pan head screw (47). NOTE: There are 3 holes on the adjustable pad (27), 3 gradients are available by adjusting these holes and adjustable plug(8).



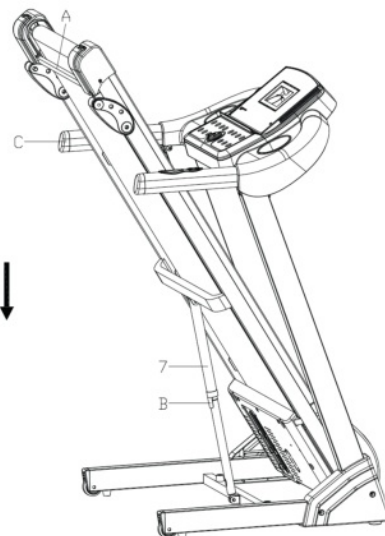
### Step 4: (Fold the machine)

1. Place your hands on A, lift the machine, then push it to the direction of the arrow, stop it when you hear the sound from the cylinder (7). NOTE: Unplug the power cord and make sure the treadmill has completely stopped before folding. Please don't operate it after folding the treadmill.



### Step 5: (Unfold the machine)

1. Grasp A by your hands, knick the place B of the cylinder (7) by your right foot, push the running board to the level of place C, then the running board will get down automatically.



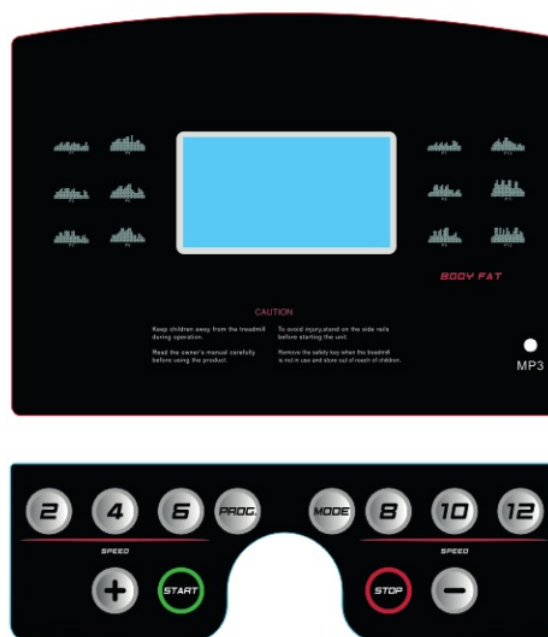
### Technical parameter

ASSEMBLY SIZE (mm)	1520x752x1180
FOLDING SIZE (mm)	900x740x1325
RUNNING SURFACE (mm)	430x1200
NET WEIGHT	46 KG
MAX WEIGHT	100 KG
SPEED RANGE	0.8-12 KM/H
INCLINE	MANUAL 3-LEVEL

## Operation instructions

### Function specifications

<b>Start:</b>	Normal startup after 3s counting backward.
<b>Number of programs:</b>	Manual modes, 12 Preset Programs, 3 User setting programs, 3 HRC, FAT.
<b>Safe lock function:</b>	Removing the safety lock in any mode could rapidly slow down the treadmill till stop. “—” will be continuously. Buttons are invalid in this condition. Restore the safety lock, the window will display commands.



### Key function

<b>START:</b>	Press “START” when the treadmill is in stop mode, the speed will be displayed as “0.8”, the treadmill will start.
<b>STOP:</b>	Press “STOP” when the treadmill is running, the data will be cleared, and the treadmill will be in manual mode after stopping.
<b>PROG.:</b>	In standby mode, press the key you can select manual mode “0.0” to “P1-P12”, “U1-U3”, 3HRC (optional), and FAT different programs; manual mode is the default mode, the default speed is 0.8KM/H, the max operating speed is 2.0km/h.

<b>MODE :</b>	In standby mode, press the key you can loop set H-1 to H-3 different countdown modes. H-1 is time c ountdown mode, H-2 is distance countdown mode, H-3 is calorie countdown mode; all mode paramet er can be set by speed +/- key, and press "START" key to start the treadmill.
<b>SPEED:</b>	"SPEED+" and "SPEED -" are accelerating and decelerating keys, they may be used to adjust parame ter setting when setting up parameters of the treadmill. When the treadmill is running, they are used to adjust the speed for 0.1km/time; after holding for more than 2s, automatic continuous acceleration and deceleration will be realized. There are fast keys on the handrail.
<b>Speed shortcut:</b>	Speed can be directly adjusted to 2km/h, 4km/h,6km/h, 8km/h and 10km/h and 12km/h by speed short cut keys when the treadmill is running.

**NOTE:** When the safety lock is off, press "PROG." + "MODE" key for 5s, the display switches between imperial and metric systems. Display "12.0" means metric systems/ Display "7.5" means imperial systems.

#### **Display function**

##### **Speed display**

Displays the current running speed.

##### **Time display**

Displays the running time under manual mode or the countdown running time under mode and programmed mode.

##### **STEPS/DIS./CAL.display**

Switch between display distance or countdown distance, calorie or countdown calorie, and current running steps.

##### **NOTE:**

Running steps is invalid when speed is less than 3.0km/h or more than 16km/h, due to differences in the user's weight and step rate.

##### **Heart rate display**

Detects heart rate signals and displays the pulse value.

##### **Oil indicator window**

"Lubrication" reminder. The display will light up the icon when lubrication is needed.

#### **Data display range of various parameters:**

TIME:	0:00 – 99.59(MIN)
DISTANCE:	0.00 – 99.9(KM)
CALORIES:	0.0 – 999 (KC)
SPEED:	0.8 – 12.0(KM/H)
PULSE:	50 – 200 (BPM)

#### **Heart rate measurement function**

While the treadmill is connected to the power, hold the pulse tester for 5s and the heart rate value will be displayed. The initial value is the measured heart rate, and its display range is: 50-200 times/minutes. In the heartbeat measurement process, there will be a heart-shaped icon flashing. The heart rate displayed is for

reference only and cannot be used as medical data.

## **Manual Modes**

### **How to enter manual mode:**

1. Switch on the power supply; then, directly enter normal mode under the manual mode.
2. In stop state, press MODE to select Normal mode, Time Countdown, Calorie Countdown and Distance Countdown modes under the manual mode.

### **Setting functions under manual mode: Time, Distance and Calorie Setting**

1. When entering the manual mode, the time is displayed as 0:00;
2. In manual mode, press MODE to enter Time Countdown mode; the time window will display the time and flicker; the initial time is 30:00; set countdown time by SPEED +/- SPEED -. Time setting range: 5:00-99:00; each time of increase/ decrease will be 1: 00.
3. In time countdown mode, press MODE to enter Distance Countdown mode; the initial distance will be displayed as 1.00 km; set the distance by SPEED +/- SPEED – in the range of 1.0-99.0 km/mi; each time of increase/ decrease will be 1 km.
4. In distance countdown mode, press MODE to enter Calorie Countdown mode; the initial distance will be displayed as 50.0kcal; set the calorie by SPEED +/- SPEED – in the range of 20.0990.0 kcal; each time of increase/ decrease will be 10.0 kcal.

### **Operation in manual mode:**

1. Press START and the motor will start operating after 3s of the countdown; the initial speed will be 0.8km/h for metric system or 0.5MPH for the imperial system;
2. Press SPEED +/- SPEED – to adjust the speed;
3. Press speed shortcuts to quickly set up to the speed marked on the key;
4. When the motor is running, press STOP and the motor will slow down and stop finally;
5. Remove the safety lock to urgently stop the motor running; then, the LCD window will display “—” and the buzzer will make the short sound of Bi-Bi-Bi.
6. When the set time reduces to zero or when the set calorie reduces to zero, or the set distance reduces to zero, the speed will gradually reduce till the stop of the machine, the buzzer will make short alarm “Bi-Bi-Bi”, and the speed window will display END; 5s later, the machine will return to the standby state and the buzzer will make long alarm “Bi-Bi”;
7. Parameters not set will increase forwards and will be reset after reaching the upper limit of the display range; in manual mode, the machine will stop when the time accumulates to be more than 99: 59 (100min).

## **Preset Programs**

Each program is divided into 20 sections; the operation time will be evenly distributed to each program section. Here below is the 12-section program running diagram.



time program		Setup time / 20 = each segment of the running time																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
P01	SPEED	2	3	3	4	5	3	4	5	5	3	4	5	4	4	4	2	3	3	5	3
P02	SPEED	2	4	4	5	6	4	6	6	6	4	5	6	4	4	4	2	2	5	4	
P03	SPEED	2	4	4	6	6	4	7	7	7	4	7	7	4	4	4	2	4	5	3	2
P04	SPEED	3	5	5	6	7	7	5	7	7	8	8	5	9	5	5	6	6	4	4	3
P05	SPEED	2	4	4	5	6	7	7	5	6	7	8	8	5	4	3	3	6	5	4	2
P06	SPEED	2	4	4	4	5	6	8	8	6	7	8	8	6	4	4	2	5	4	3	2
P07	SPEED	2	3	3	3	4	5	3	4	5	3	4	5	3	3	3	6	6	5	3	3
P08	SPEED	2	3	3	6	7	7	4	6	7	4	6	7	4	4	4	2	3	4	4	2
P09	SPEED	2	4	4	7	7	4	7	8	4	8	9	9	4	4	4	5	6	3	3	2
P10	SPEED	2	4	5	6	7	5	4	6	8	8	6	6	5	4	4	2	4	4	3	3
P11	SPEED	2	5	8	10	7	7	10	10	7	7	10	10	5	5	9	9	5	5	4	3
P12	SPEED	3	4	9	9	5	9	5	8	5	9	7	5	5	7	9	9	5	7	6	3

### User-setting programs:

Besides the 12 inner systems, the treadmill set up 3 user-defined programs: U1, U2, U3.

1. Continuously press "PROG." key until the expected program (U1/U2/U3) display in the standby condition, while the "TIME" window flash, display the setting time, press "SPEED+", "SPEED-" to set up expected run time, press "MODE" key to enter program parameter, then set up the first time period parameter, by "SPEED +"/"SPEED -" key or shortcut key to set the speed; Press the "MODE" key to finish the first time period setting, and enter the next time period setting, until all 20 time period settings. The parameter will be kept permanently until resetting, and all parameters will not be lost when power off.
2. Selection and start the user-defined program:
3. In the standby condition, continuously press the "PROG." key until the expected user-defined program U1/U2/U3 display, set up the run time, press the "START" key to turn on the treadmill.

### Body Fat Test:


1. In the standby state, press "PROG." to enter FAT (Physical fitness test) program. Press "MODE" to enter the program of F—1, F—2, F—3, F—4, F—5 (F—1:gender, F—2:age, F—3:height, F—4:weight, F—5:physical test), Press SPEED +/ SPEED – to set the parameter of 01-04(see below detailed table), then press "MODE" to enter the program of F—5 for physical test. At this state, hold the handle pulse board for 5-6 seconds and it will display the FAT, check if the weight matches your height.
2. FAT is to measure the relevance between height and weight, not the body proportion. FAT is suitable for every man and woman; it provided important grounds for adjusting the weight with other health indicators. The perfect FAT is between 20-24, which means if less than 19 is too thin, and if between 25-29 is overweight and if more than 30 is obese.

### **HRC Function (optional)**

HRC1 speed limit (Max-4.0km/h), HRC2 speed limit (max-2.0km/h), HRC3 Max

1. HRC setting after repeatedly pressing P button to get to HRC, press M to advance to the next setting, adjust speed or inclination accordingly
  - Age setting:13-80, default 30.
  - Target heart rate:  $(220 \text{ minus age}) * 0.6$ .
  - Target heart rate is changeable, ranging from 0.45 to 0.75  $(220 \text{ minus age})$ .
  - Maximum heart rate:  $(220 \text{ minus age})$ .
2. Speed change:
  - Change sequence, HRC detects heart rate every 30 sec.
  - If the user's heart rate is lower than the target heart rate by 30 times/min, then speed increases by 2 km/h.
  - If such a discrepancy is within 1-29 times/min, then speed increases by 1 km/h.
  - Vice versa, if the user's heart rate is higher than the target heart rate, the speed decreases, and the same rule applies.
3. During the following circumstances, the treadmill will run at 1km/h for 15 sec and then shut down automatically; in the 15 sec, the treadmill will beep for each second elapsed
  - A: No heart rate detected for more than one minute
  - B: Heart rate exceeds  $(220 \text{ minus age})$

### **Others**

1. When a countdown parameter runoff, display "END", the alarm rings 0.5s every 2s, until the treadmill full stop, then return to manual mode.
2. Countdown time, countdown calorie and countdown distance can only be set up for one of them. The last time setting will be implemented. The parameter set will be counted backward while other parameters will be counted forwards.
3. The standard calorie is about 70.3kcal/km.
4. The acceleration is 0.5Km/S and the deceleration is 0.5Km/S.
5. MP3 music audio amplification, input from the enter hole by the side.
6. In the process the un-set parameter will be up cumulative, the display clear when up to the max range; in the manual mode when the time accumulation excess 99:59(100min) the treadmill stops.
7. "Lubrication" reminder: After every 300KM, the screen will show  icon. In standby mode, remove the safety key then hold the "STOP" button simultaneously till buzzing sounds, this will cancel this reminder. 300KMs later, the loop runs again.

## Error message codes

Problem	Potential reasons	Solutions
——	Safe lock falls	<ol style="list-style-type: none"> <li>1. Place back the safe lock;</li> <li>2. Replace safe lock switch or magnetic sensor in the electronic meter; if the problem still fails to be solved, replace the electronic meter;</li> </ol>
E01	After power on, the electronic meter displays E01	<ol style="list-style-type: none"> <li>1. Check whether the connecting joint between the electronic meter and the core wire of the controller is loose; whether wires are damaged; whether the core wires are incorrect connecting order.</li> <li>2. The controller may be defective. Check and replace a good one.</li> <li>3. The electronic controller's IC may not be plugged to the place. Check and ensure good plugging.</li> <li>4. The transformer may be damaged. Check and replace a good one.</li> </ol>
E02	Explosion-proof protection or motor abnormality	<ol style="list-style-type: none"> <li>1. Check whether the power supply voltage is less than 50% of the normal value; please ensure correct voltage and test again;</li> <li>2. Check whether motor wires are well connected; re-connect motor wires, or, if the problem still fails to be solved, replace the motor;</li> <li>3. Check whether there is a peculiar odor generated by the controller; if yes, it means that IGBT has been broken down to cause a short circuit; then, replace the controller.</li> </ol>
E03	No sensory signal	<ol style="list-style-type: none"> <li>1. Check whether the photoelectric sensor directs to the hole on CD; check whether wires of the photoelectric sensor are damaged and whether terminals of the photoelectric sensor and speed terminals on the controller are firmly connected.</li> </ol>
E05	Over-current protection	<ol style="list-style-type: none"> <li>1. It may be the system's self-protection against the excessive current when the load exceeds the rated value; restart the machine;</li> <li>2. Some part of the treadmill is jammed so that the motor cannot rotate, thus triggering the self-protection of the system against excessive current under excessive load; adjust the treadmill and restart it or add lubricant.</li> <li>3. Check whether there is over-current sound or burning odor when the motor is running; replace the motor;</li> <li>4. Check whether the controller emits the odor of burning; if yes, replace the controller.</li> </ol>

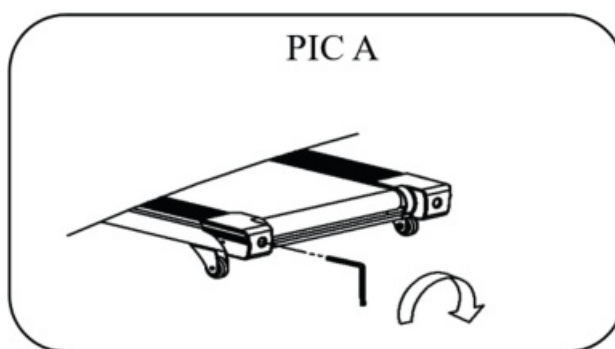
No display on the electronic meter	The controller is not powered on or is damaged	<ol style="list-style-type: none"> <li>1. Firstly, check whether the over-load protector has tripped off; if yes, press it;</li> <li>2. Check the power supply switch, over-load protector, and the control - let's power cord and transformer to ensure well connection;</li> <li>3. Check whether the power cords from the electronic meter to the controller are well collected; dismantle the pillar to check connecting joints on each section of the wiring from the electronic meter to the controller; ensure that each wire core is well connected; or the reason may be the communication power cord defect (damaged or broke down); in such case, re-connect or replace wires.</li> <li>4. The transformer is damaged; replace the transformer</li> </ol>
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## Maintenance instructions

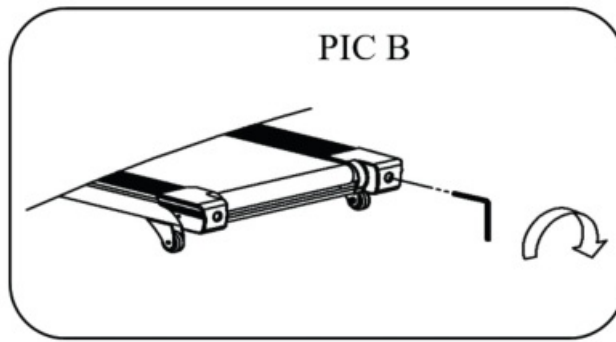
### Walking belt centering and tension adjustment

**NOTE:** DO NOT OVERTIGHTEN the walking belt. This may cause reduced motor performance and excessive roller wear.

1. Place treadmill on a level surface
2. Run treadmill at approximately 3.5 mph
3. If the belts are off the track to the right side, please screw the right adjusting bolt clockwise slowly, noticing the change of the deviating distance, until center the belt. (Attention: the space between the belt and the right/left edgings is at a distance normally. And the gap between the right and left distance should be no more than 5mm.
4. If the belts are off the track to the left side, please screw the left adjusting bolt clockwise slowly, noticing the change of the deviating distance, until center the belt. (Attention: the space between the belt and the right/left edgings is at a distance normally. And the gap between the right and left distance should be no more than 5mm.



Picture A: If the belt has drifted to the LEFT



Picture B: If the belt has drifted to the RIGHT

**WARNING:** Always unplug the treadmill from the electrical outlet before cleaning the unit.

## Cleaning

- General cleaning of the unit will greatly prolong the treadmill. Keep treadmill clean by dusting regularly. Be sure to clean the exposed part of the deck on either side of the walking belt and the side rails. This reduces the buildup of foreign material underneath the walking belt.
- The top of the belt may be cleaned with a wet, soapy cloth. Be careful to keep liquid away from inside the motorized treadmill frame or from underneath the belt. **Warning:** Always unplug the treadmill from the electrical outlet before removing the motor cover. At least once a year remove the motor cover and vacuum under the motor cover.

## Walking belt and deck lubrication

This treadmill is equipped with a pre-lubricated, low-maintenance deck system. The belt/deck friction may play a major role in the function and life of your treadmill, thus requiring periodic lubrication. We recommend a periodic inspection of the deck.

### Light user (less than 3 hours/week):

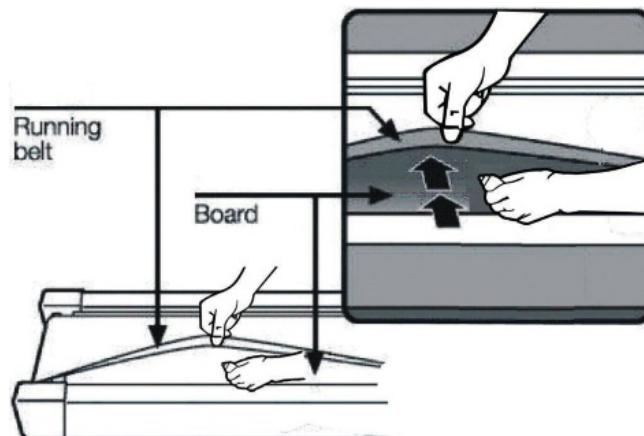
Annually

### Medium user (3-5 hours/week):

Every six months

### Heavy user (more than 5 hours/week):

Every three months



## Parts list

Part No.	Description	Qty	Part No.	Description	Qty
1	Bottom frame	1	40	Allen screw M6x55	3
2	Mainframe	1	41	Allen screw M6x30	8
3L/R	upright tube	1pr.	42	Cross pan head screw M6x15	2
4	Computer frame	1	43	Cross washer head screw M5x8	5
5	Front roller	1	44	Cross washer head screw M4x8	8
6	Rear roller	1	45	Cross pan head screw ST4x40	6
7	Air cylinder	1	46	Cross pan head screw ST4x20	2
8	Adjustable plug	2	47	Cross pan head screw ST4x16	34
9	Top motor cover	1	48	Cross pan head screw ST4x8	8
10	Bottom motor cover	1	49	Cross washer head screwST4x12	6
11	Top computer cover	1	50	Cross pan head screw ST2.9×9.5	6
12	Console panel	1	51	Cross pan head screw M4x8	8
13	Safety key base	1	52	Switch	1
14L/R	Base cover	1pr	53	Locking washer ø8×1.2	14
15	Foam grip	2	54	Locking washer ø6×1.2	3
16	Running board	1	55	Flat washer ø12×1.0	2

17	Running belt	1	56	Flat washer $\varnothing 8 \times 1.5$	6
18	Side rail	2	57	Circuit breaker	1
19L/R	Endcap	1pr	58	Power wire	1
20	Transport roller	2	59	Standard spring washer $\varnothing 8$	6
21	Flat pad	2	60	Nylon nut M8	4
22	Ring end cap	2	61	Nylon nut M6	8
23	Power wire buckle	1	62	Lower control	1
24	Belt	1	63	Shortcut key	2
25	Small foot pad	4	64	Computer top wire	1
26	Small transport roller end cap	2	65	Computer connecting wire	1
27	Adjustable pad	2	66	Computer bottom wire	1
28	Rubber pad	8	67	Safety key	1
29	Plastic fixing washer	2	68	Backlight unit	1
30	Oblate inner plug	2	69	DC motor	1
31	Bolt	2	70	Filter (Optional)	1
32	Allen bolt M8x45	2	71	Audio socket (optional)	1
33	Allen bolt M8x40	7	72	MP3 (Optional)	1





company.




**Correct Disposal of this product**

This marking indicates that this product should not be disposed of with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources.



**Frontier ®**  
**Makadamgatan 14 | 254 64 Helsingborg | Sweden**  
[info@order.se](mailto:info@order.se)

**Documents / Resources**

	<p><a href="#">FRONTIER FRB210 Treadmill Running Exercise Machine</a> [pdf] User Manual FRB210, Treadmill Running Exercise Machine</p>
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[Manuals+](#).