

ADVANCED CARDIO EQUIPMENT (A.C.E)

A-TRAINER

a revolutionary concept in fitness equipment



Contents

About the A-Trainer	3
Safety instructions	4
Personal health	4
Product diagram	5
The console	6
Operating the A-Trainer.....	7
Exercise positions	7
<i>Chest and triceps exercise</i>	7
<i>Lats exercise position</i>	8
<i>Abdominal exercise position</i>	9
Suggested exercise programmes	10
<i>Fat burning exercise</i>	10
<i>Cardio vascular exercise</i>	10
<i>Sprint training exercises</i>	12
<i>Muscular endurance</i>	12
<i>Building muscle mass</i>	14
General maintenance.....	15
Warranty	15
Transportation.....	16
Easily solved problems.....	16

About the A-Trainer

The A-Trainer combines the three key elements of physical exercise: **cardio vascular, muscular endurance and muscle building**. It has been developed to provide a comprehensive upper body work out using innovative techniques which offer the athlete the opportunity to alternate their training programme, by effectively targeting all these elements using one piece of apparatus.



Safety instructions

Ensure you have familiarised yourself with the operation of the machine before use, in particular, the various controls.

Before commencing exercise operate the advance button to ensure the arms are located at the start position.

Position your body as shown in the exercise diagrams and ensure form is maintained throughout the duration of your chosen workout.

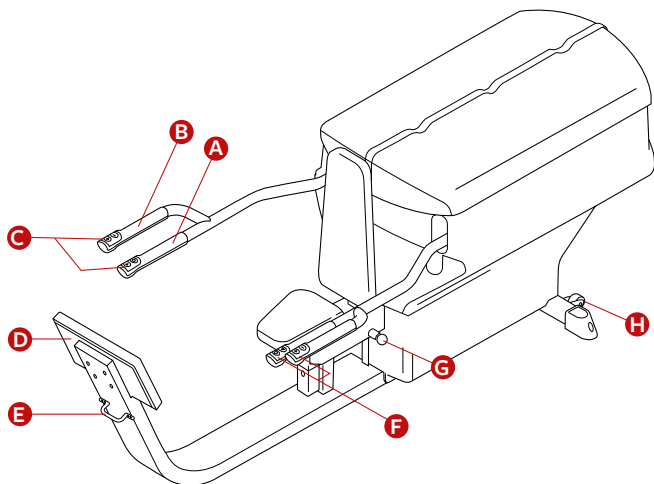
Do not place towels or items of clothing on any part of the machine during exercise.

Personal health

Do not exercise if you have any injury or medical condition.

It is advisable to begin your exercise on the 1st level of each exercise type. Do not progress to further levels if you are suffering breathlessness or any pain. If symptoms persist following exercise consult a doctor.

Product diagram



- A** Primary arms
- B** Auxiliary arms
- C** Advanced control
- D** Console

- E** Carry handle
- F** Resistance control
- G** Seat adjustment
- H** Wheels

The console

The console displays various information relating to your exercise

The touch screen will fire up once you engage the A-Trainer

The upper right figure displays the number of reps or revolutions which should be used when completing sets

The lower right hand figure indicates resistance level.

This is controlled by the orange buttons marked + and -

Use these buttons to regulate resistance during exercise.

The top left display indicates R.P.M. This relates to the speed you are generating. The maximum speed is set at 250 R.P.M.

The bottom left figure represents time elapsed since exercise commenced. This is displayed in minutes and seconds.



Operating the A-Trainer

Exercise positions

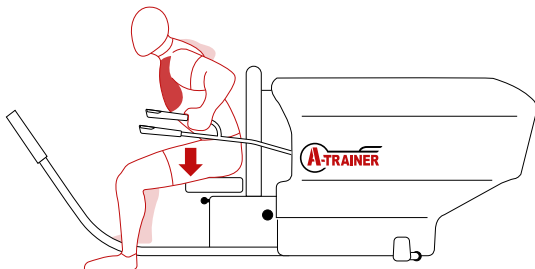
The A-Trainer works all upper body muscle groups during exercise but by varying your body shape and hand position you can target specific muscle groups for extra work. The figures below show the various body positions which should be adopted to target the individual muscle groups.

For these exercises you should start with 20 reps x 3 sets. Initially set the resistance level on 0. You can increase resistance as you progress. Please note good form is essential to target specific muscles and prevent injury.

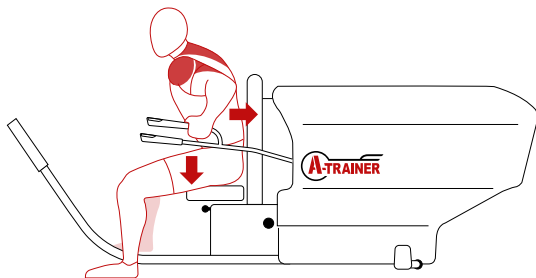
For fat burning and cardiovascular workouts you can alternate your body positions during exercise whilst aiming to maintain your cadence.

Chest and tricep exercise positions

To exercise the pectoralis muscles adopt the position as shown below ensuring the back remains flat. From the starting position push down allowing momentum to return the unit to the start position.



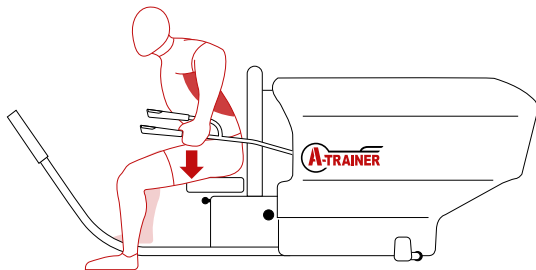
By varying the angle of the back, as you lean forward, you will also target different muscles, incorporating triceps, trapezius and shoulders.



Lats exercise position

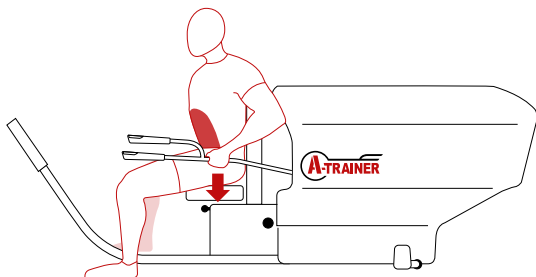
To place more emphasis on the latissimus dorsi adopt the position shown below placing the hands on the auxiliary arms directly below your shoulders.

Push your arms down from the start position allowing momentum to return the arm to the start position. Please note other muscles will be required to assist to give a comprehensive workout.



Abdominal exercise position

To target the abs ensure you are seated at the back of the seat with your back flat against the backrest. Set the resistance level to a number which you are comfortable with. Place your hands below the junction. Engage your abs and push down from the start position ensuring your back maintains contact with the backrest.



Suggested exercise programmes

Fat burning exercises

Fat burning exercise is carried out for extended periods at relatively low rpm with no resistance. You don't need to exercise at high intensity to burn calories. This type of exercise is also a good way to start your exercise program using the A-Trainer. It will help you to develop the correct technique for more strenuous exercise and ensure you target the intended muscle groups

	Level 1	Level 2	Level 3
Duration (mins)	RPM	RPM	RPM
10	50	60	70
15	50	60	70
20	40	60	70
30	40	50	60
45	40	50	60

Cardio vascular exercises

Cardiovascular exercise relates to any form of activity that uses aerobic metabolism. Your heart rate increases and you breathe more deeply to maximize the amount of oxygen in your blood and help you to use more oxygen efficiently. Hence, you feel more energized and do not get tired quickly.

Cardio improves many aspects of health, including heart health, mental health, mood, sleep, weight regulation and metabolism. The heart becomes more efficient with every beat as it pumps oxygen-carrying blood, the lungs become more effective in taking in oxygen, and the muscles more equipped to use more oxygen.

Please note as the breathing and heart rate increase, the surge should not be so much as to make you feel that you need to stop and rest. In the course of a cardio workout if you experience a strong urge to stop and rest, unusual pain or alarming symptoms, then you have to stop immediately and seek medical attention.

For an exercise to be considered cardio, it must raise your heart rate and breathing rate into the moderate to vigorous intensity level (by at least 50-percent of the normal rate) for a minimum of 10 minutes. For this program of exercises set the resistance level at 0. **Increasing** the cadence will increase your heart rate.

	Level 1	Level 2	Level 3	Level 4
Duration (mins)	RPM	RPM	RPM	RPM
2	80	90	100	110
5	80	90	95	100
10	75	80	85	90
15	70	75	80	85
25	60	70	80	90
30	60	65	70	80
45	50	60	70	80
60	50	60	70	75

Sprint training exercises

To vary your cardio workout you may want to try interval training. This is where you are required to reach 150 RPM on 0 resistance as many times as possible in a given time.

Duration (mins)	Resistance	Hit 150 RPM		
2	0	5 times	7 times	10 times
3	0	7 times	10 times	12 times
4	0	9 times	15 times	20 times
5	0	10 times	20 times	25 times

Muscular endurance exercises

Muscular endurance is the ability to continue contracting a muscle, or group of muscles, against resistance, such as weights or body weight, over a period of time.

Increasing the performance of these muscles means they can continue to contract and work against these forces.

For these exercises resistance becomes part of the equation.

You should aim to do the following programmes in sets of 6 with a 1 minute break between sets.

Duration (mins)	RPM	Resistance	RPM	Resistance
2	100	5	120	15
3	100	5	120	15
5	100	5	120	10
8	100	5	120	10
12	100	5	120	10
20	100	5	120	10

Duration (mins)	RPM	Resistance	RPM	Resistance
2	110	10	120	30
3	110	10	120	30
5	110	10	120	20
8	110	10	120	20
12	110	10	120	15
20	110	10	120	15

Building muscle mass

Muscle mass refers to the weight of the muscles in our bodies, or the total amount of muscle tissue. More specifically, it is the measure of the size of the muscle fibres and the number of fibres present in the muscles. Muscle mass plays a crucial role in maintaining our physical health, including our strength, balance, and metabolism. It is also an important factor for athletes and fitness enthusiasts as it directly correlates with their performance in physical activities.

For intense muscular workouts high levels of resistance should be used. You should already be familiar with the form and technique. Set the resistance level from 80-99 for these exercises.

As with muscular endurance programs allow a minute break between sets.

Reps	Sets	Resistance	Reps	Sets	Resistance
20	3	80	20	6	99
30	3	80	30	6	99
40	3	80	40	6	99
50	3	80	50	6	99
30	4	80	30	6	99
40	4	80	40	6	99
50	4	80	50	6	99
40	6	80	40	6	99
50	6	80	50	6	99

General maintenance

The apparatus must be kept in a clean and dust free environment a dust cover is provided which should be used during periods of prolonged inactivity. It is advisable to wipe the machine with a mild disinfectant cloth at the end of each day to prevent the spread of germs. When cleaning the display screen apply a proprietary cleaning product to a soft cloth. Do not spray directly onto the apparatus.

Warranty

The apparatus is warranted for 6 months for moving parts with a lifetime guarantee on fixed components. To prevent any unnecessary damage regular inspections should be made to ensure no obvious defects have arisen. If a part is broken or malfunctioning, switch off the machine and call the administration office who will arrange for a service engineer to attend. It may be possible to replace minor items yourself. This will have been explained during the installation.

Transportation

The apparatus is relatively easy to transport. First ensure all electrical cables are removed, with power turned off. The product has fixed wheels at the rear and a carry handle fixed to the screen mount. Simply lift the apparatus using the carry handle and use the wheels to manoeuvre the machine to its new location. Do not attempt to lift the apparatus by the arms or any part of the cover panels. This may cause injury or damage to the apparatus

Easily solved problems

Any unusual noise when operating the apparatus should be immediately investigated. This may be minor such as a loose bolt or the apparatus moving during intensive exercise. Before inspecting the machine turn off all power and remove the plug

If the bearings are damaged or the belt is worn you must contact the service team who will make an appointment to replace faulty or damaged parts.



Meanwhile, please do not hesitate to contact us should you require any further information.

Robert Howett | bob@A-Trainer.co.uk
Ray McCallum | ray@A-Trainer.co.uk