

PETER LYNN Arc 130 T-Arc

Congratulations on purchasing the Peter Lynn Arc 130 Trainer Arc.

The T-Arc is a miniature 1.3 square metre version of the larger Peter Lynn Arc range of kite-surfing kites. It is easy to use with just a single small stick at each wingtip making it robust and durable. The T-Arc is lightweight and fast to set-up and can be quickly packed into its small bag to fit under a car seat or into a backpack. It is a quick flier and a lot of fun with its responsive turning and smooth pull. The T-Arc is a cheap and a safe way to learn the basics of flying much larger kite surfing kites.

Safety

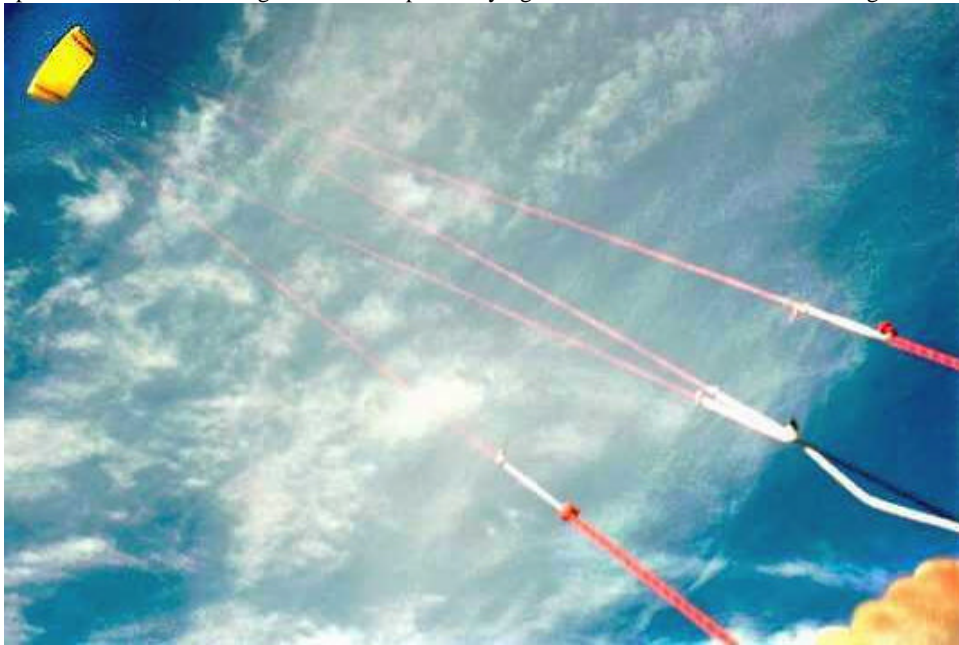
Wind Range: 5-25kts, 10-45km/hr, because the kite travels at several times the wind speed more wind than this risks line and kite breakages, but with care taken to ensure that the T-Arc does not fly too fast they can be used in stronger winds.

Ages: 10 years old and up.

Do not fly the kite up-wind of overhead power lines or trees, avoid flying during electrical storms or very strong winds. Be very careful flying around people, they will probably not be hurt if the kite hits them but the lines are more dangerous and can catch on ears, noses, necks, etc and can cause burns and cuts or rip earrings and studs out.

Setting the Kite Up

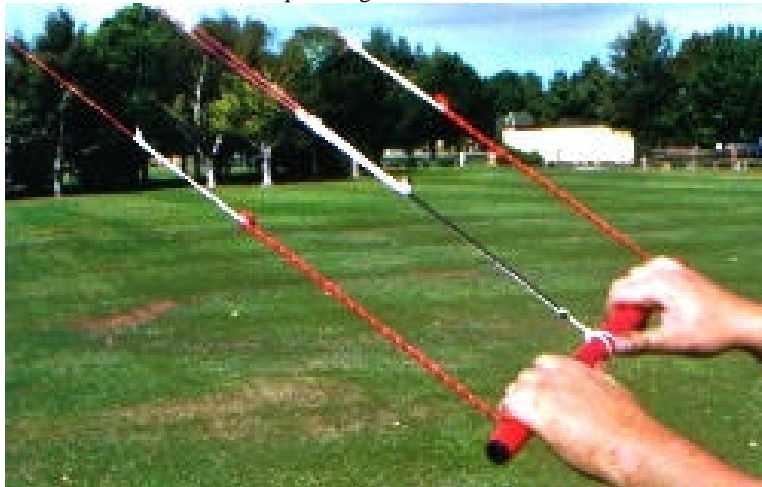
The set-up includes a kite, 4 strong low stretch Spectra flying lines and a control bar for steering the kite.



The kite is ram air inflated, it uses the motion of the kite through the air to force air into the kite through non-return valves at the leading edge, these valves help to prevent the air from getting out when the kite slows down. The kite has a top and a bottom surface, the bottom surface has the gauze covered valves close to the leading edge in the middle and is the side of the kite seen by the kite flier when the kite is flying.

The four lines consist of two pairs of lines; the two main lines are attached to the main or centre leader line of the control bar and go to the leading edge (front) corners of the kite. The two rear or brake lines are attached to the outer leader lines on the control bar and go to the trailing edge (rear) corners of the kite. The main lines are

generally slightly stronger than the brake lines. Each of these pairs of lines should be of equal length, though there may be some slight variation between the two pairs. If they are not of equal length then they can be easily adjusted by untying the knot that forms the loop at either end of the longer line, sliding the sleeve along slightly and re-tying the knot so that the lines are of equal length.



The leader lines should be adjusted so that the combined length of each leader line and its attached flying line is exactly the same. If there is a piece of bungy line in your main (centre) leader then the combined length of the main lines and leader with the bungy stretched out to its maximum should be the same as the brake lines and leaders.

When unwinding the lines from the control bar be sure to pull them off the same end that you wound them on. Otherwise you will get a huge number of twists in your lines that will take a lot of time to untwist.

Lines can stretch out slightly over time with use, if the kite starts to fly badly after a period of use you may need to re-adjust the length of the flying lines or leader lines on the control bar.

Launching

It is very helpful to have someone (preferably experienced) help you to launch the T-Arc when learning, with practice it is quite easy to launch the T-Arc by yourself.

Stand directly upwind of the T-Arc with the control bar held in front of you. Get your helper to stand facing you holding the T-Arc up in front of them by the leading edge. At this point all of the lines should be untwisted with no line crossing any other line. To launch pull the T-Arc sharply out of your helper's hands, do not get them to throw the kite into the air – this never helps.

The T-Arc needs to be fully inflated to fly properly, pre-inflation also makes launching a lot easier. If you are flying in a strong wind then the T-Arc can be pre-inflated by gripping one tip of the kite in each hand and holding the kite up so that it catches the wind. The wind forces air into the kite through the inlet valves at the leading edge. If the wind is light you will not be able to inflate the kite in this way and you will have to launch the kite and fly it very carefully allowing the kite's speed through the air to generate the wind required to inflate it. When launching the T-Arc uninflated you will not be able to turn the kite until it is partially inflated by the wind, as it gets more inflated you can turn it faster.

Uninflated launching is made much easier by pulling in on the brake leaders by 50-100mm. This places more tension on the brake lines and helps to prevent the T-Arc from collapsing while uninflated.

To launch the kite unassisted prop the kite up against something like a pole a bush or a fence and launch with the same sharp pull.

Flying Tips

Light wind launching and flying is much harder than strong wind, it is easier to learn in stronger winds.

Kites hate turbulent wind, it makes flying much more violent and difficult. Try to find a spot that has a clear space upwind free of turbulence generators like trees, houses and hills. Beaches, large open spaces and hill tops are the best locations for finding smooth wind.

Steering is very simple; pull the left hand side of the control bar to turn the kite left, right to turn right. The T-Arc can only feel relative changes in the lengths of the lines, it does not care if you spin the control bar around the axis of the lines – think ‘bicycle handle bars’ not ‘steering wheel’. The T-Arc will fly quite happily with the lines twisted over several times so do not panic if you perform a loop, just loop the kite back in the other direction when you feel like it.

If the kite is sitting very low in the sky and has stopped moving it may have ‘stalled’. To get it moving again you may need to ‘pump’ it by rapidly pulling the control bar towards you then letting it out again – this will generally get the T-Arc moving again. It also helps to pull in the main (centre) leader line by perhaps 100 mm when you do this so that there is more pull on the main lines than on the brake lines – this also helps to pull a kite out of stall.

More T-Arc speed can be generated by pulling in slightly on the main (centre) leader of the control bar to place more tension on the main (front) lines, however this makes the steering worse and can also lead to annoying luffing and collapsing, particularly during violent manoeuvring.

Repair

Small holes in the kite can be fixed by using clear mylar tape to seal them up, larger rips and tears may need to be sewn – seek help from your retailer.

If the lines are cut or broken you may need to seek help from the retailer you bought it off to fix them as Spectra lines are very slippery and knots tend to slip.

If you have a small piece of bungee in your control bar main leader that has failed then you can replace it with another piece of similar bungee or a piece of string or rope that is as long as the fully stretched out bungee was. Alternatively you can just attach the main lines to the remaining piece of main leader line and shorten the outside (brake) leader lines to compensate for the missing bungee.