Depower bridle tuning guide

High performance racing equipment is designed to exact specifications and even the smallest deviation in measurements can make the difference between finishing first, or last. To ensure that your Peter Lynn kite delivers the performance it is designed for, it is key that you take proper care of your equipment.

There are three parts connecting your bar to the wing, and all three are highly influential on the overall performance of your kite. And all three parts should be regularly checked for wear, tear, line stretch or line shrinkage.

Flying lines

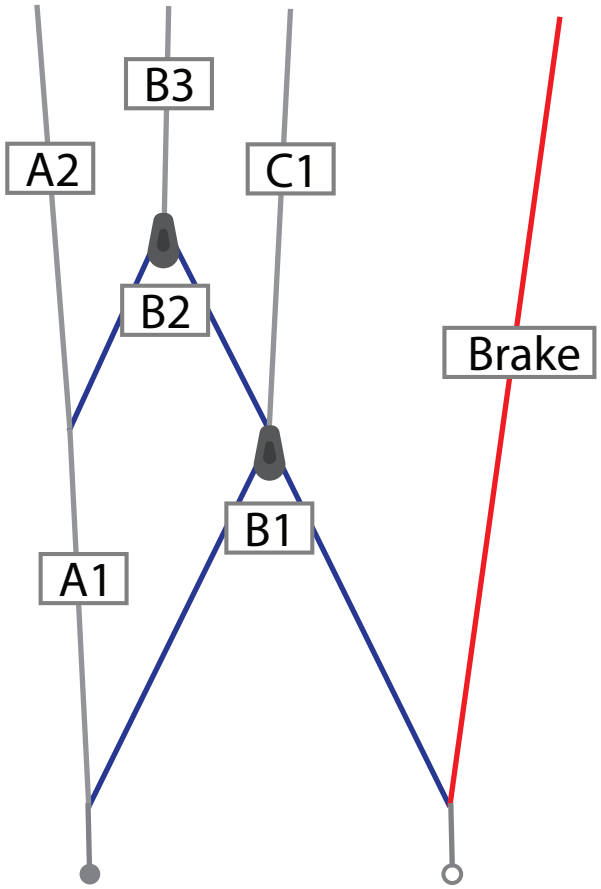
Your flying lines should be equal in length and free of any knots or wear. Measure your flying lines regularly. If you have the Peter Lynn Aviator bar there are adjustment knots beneath the floaters.

The speed system

The speed system (diagram on the right) connects your flying lines to the bridle and allows you to change the angle of attack of the wing. This system should be free of wear and this should be checked before every launch.

Bridle

Lastly, the bridle itself. This is the most critical part of the set-up and the part that is most prone to stretch beyond factory spec. Ideally you should **replace your bridle every 50 to 60 hrs of flying time** depending on the intensity of use.
Bridle lines which are worn or stretched beyond factory spec. (lines with a deviation of 10mm or more) should be replaced.



A1	40cm
A2	41cm
B1	79cm
B2	50cm
B3	22,5cm
C1	44 cm

Speed system tuning guide

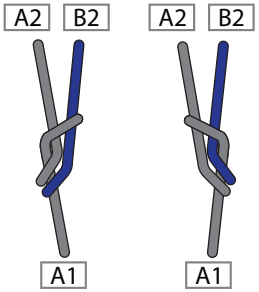
Adjusting your speed system
The A1 and A2 lines are most likely to stretch as these get to endure the highest stress levels, and after the A lines the B lines. The C lines stretch the least.

There are several ways to adjust the measurements of your speed system. Putting knots in stretched lines is the quickest but you can also change the way lines are connected,

Half hitch

Figure eight

Putting knots in lines
There are two knots you can use to shorten lines; the half hitch and the figure eight. The Half hithc shortens the line by 1cm and the figure eight 2cm. If you speedsystem is stretched evenly it is common practice to put a figure eight knot in the A2 and a half hitch in the B2



Changing the connection
Switching the A2 and the B2 shortens the A2 by about 5mm, Switching these is easily done by undoing the larkshead and redoing it through the opposite side.

Double larkshead
Another way to shorten lines is to double the larkshead connection

Larkshead

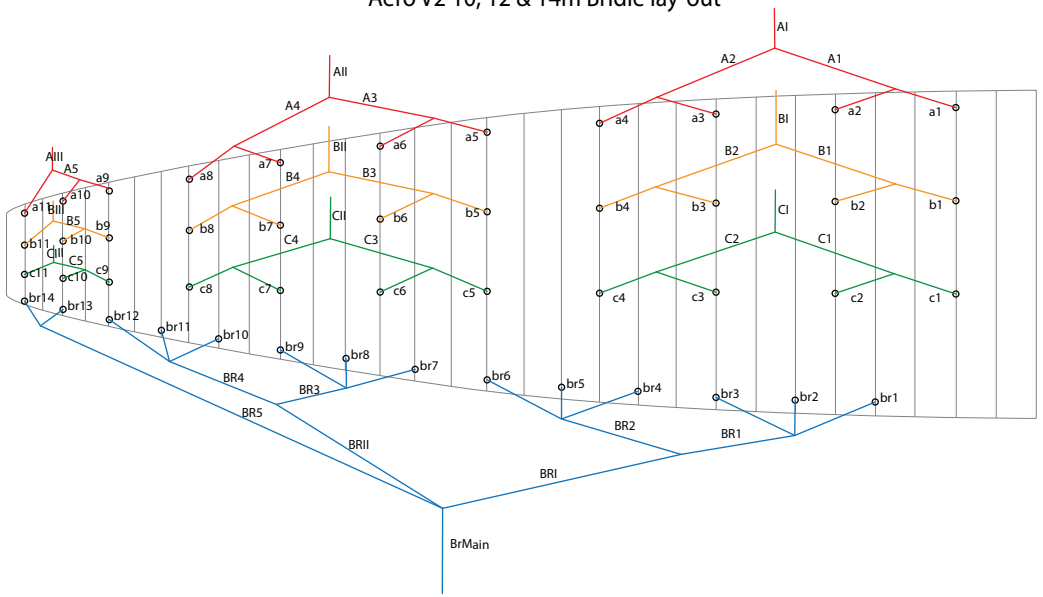
Double larkshead

It is worth noting that any stretch in the speedsytem is quadrupled at the depower strap on your bar, IE: A1 is stretched 2cm means that you have to correct 8cm on the strap

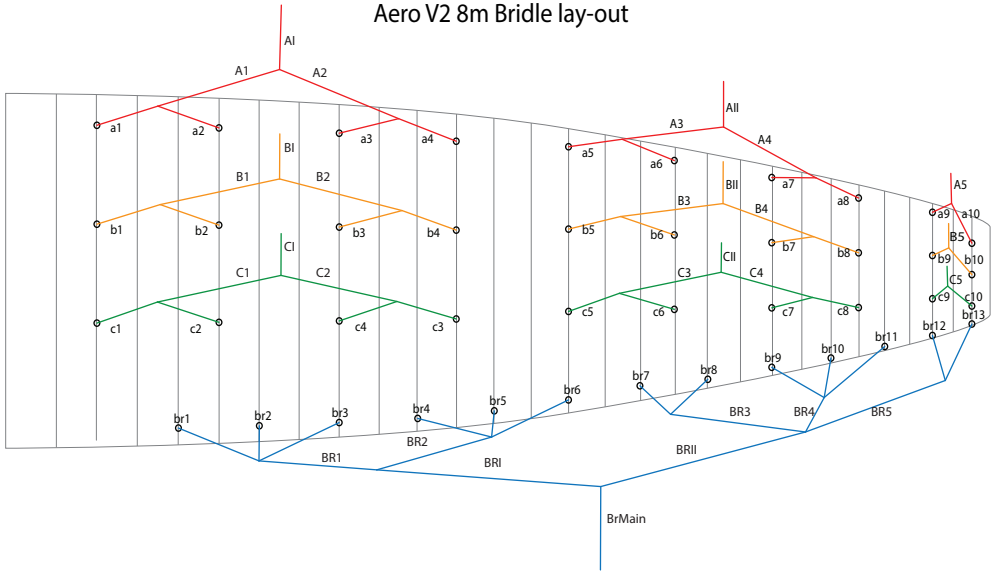
Bridle overview

Aero V2 6m Bridle lay-out

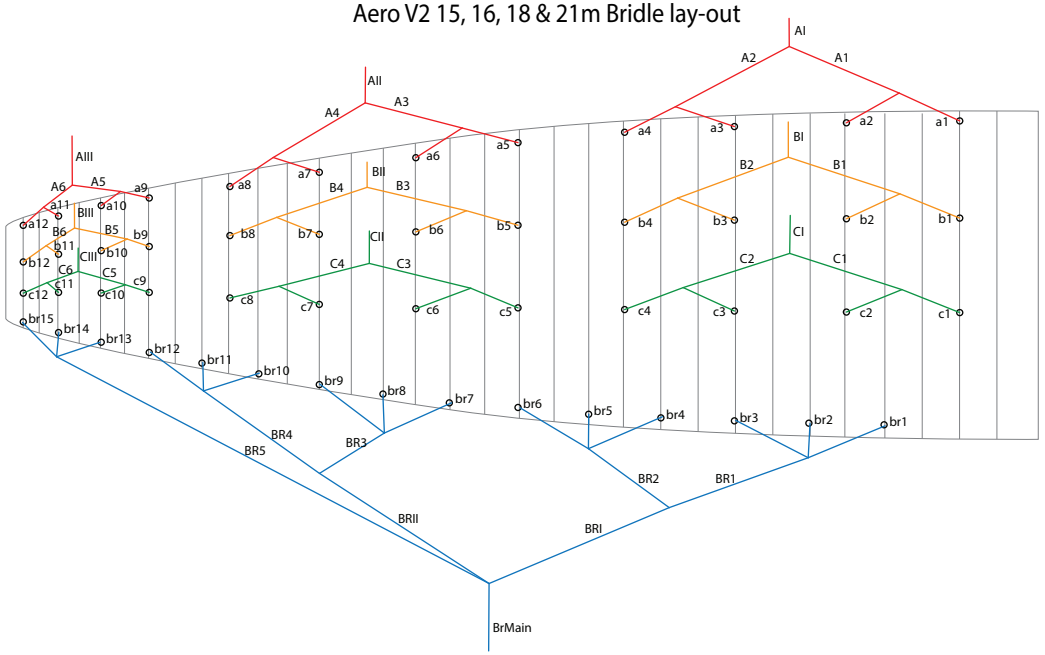
Aero V2 10, 12 & 14m Bridle lay-out



Aero V2 8m Bridle lay-out



Aero V2 15, 16, 18 & 21m Bridle lay-out



AERO V2 Bridle length chart

LINE	6m	8m	10m	12m	14m	15m	16m	18m	21m	Diam./Kg
a1	991	991	1131	1208	1528	1382	1460	1521	1645	DC 60
a2	764	764	903	961	1284	1132	1196	1244	1349	DC 60
a3	758	758	895	942	1307	1109	1114	1202	1297	DC 60
a4	684	684	814	860	1208	1021	1019	1104	1195	DC 60
a5	899	899	947	1022	1361	1144	1220	1295	1371	DC 60
a6	679	679	712	768	1099	875	944	1003	1059	DC 60
a7	661	661	690	782	1097	882	939	989	1081	DC 60
a8	566	566	600	685	970	786	826	872	959	DC 60
a9	454	454	514	575	905	762	751	778	840	DC 60
a10	378	378	408	460	778	620	600	619	669	DC 60
a11	-	-	834	929	1284	610	586	599	642	DC 60
a12	-	-	-	-	-	555	533	544	584	DC 60
A1	900	900	1000	1100	1200	1200	1200	1300	1400	DC 100
A2	750	750	850	950	1000	1050	1100	1150	1250	DC 100
A3	750	750	800	900	950	950	1050	1100	1200	DC 100
A4	600	600	650	700	750	750	850	900	950	DC 100
A5	2900	2900	500	550	600	650	600	650	700	DC 100
A6	-	-	-	-	-	550	500	550	600	DC 100
AI	2900	2900	3250	3600	3850	4050	4200	4450	4800	DC 161
AII	2450	2450	2950	3250	3500	3800	3800	4050	4400	DC 161
AIII	-	-	2900	3200	3400	3600	3800	4050	4400	DC 161
b1	970	970	1090	1164	1481	1353	1410	1467	1586	DC 40
b2	748	748	866	921	1241	1108	1150	1193	1294	DC 40
b3	748	748	863	908	1269	1091	1074	1158	1248	DC 40
b4	680	680	790	834	1178	1011	987	1069	1157	DC 40
b5	900	900	927	1000	1336	1138	1193	1264	1337	DC 40
b6	685	685	698	753	1081	877	923	980	1033	DC 40
b7	672	672	682	772	1085	890	925	973	1062	DC 40
b8	577	577	596	680	963	796	817	862	947	DC 40
b9	470	470	513	574	902	778	745	771	832	DC 40
b10	389	389	410	461	777	638	598	616	665	DC 40
b11	-	-	830	926	1279	630	585	597	639	DC 40
b12	-	-	-	-	-	564	521	531	570	DC 40
B1	900	900	1000	1100	1200	1200	1200	1300	1400	DC 60
B2	750	750	850	950	1000	1050	1100	1150	1250	DC 60
B3	750	750	800	900	950	950	1050	1100	1200	DC 60
B4	600	600	650	700	750	750	850	900	950	DC 60
B5	2900	2900	500	550	600	650	600	650	700	DC 60
B6	-	-	-	-	-	550	500	550	600	DC 60
BI	2900	2900	3250	3600	3850	4050	4200	4450	4800	DC 100
BII	2450	2450	2950	3250	3500	3800	3800	4050	4400	DC 100
BIII	-	-	2900	3200	3400	3600	3800	4050	4400	DC 100

LINE	6m	8m	10m	12m	14m	15m	16m	18m	21m	Diam./Kg
c1	991	1027	1139	1217	1539	1429	1469	1528	1652	DC 40
c2	764	810	919	978	1303	1190	1213	1259	1365	DC 40
c3	758	810	917	966	1333	1175	1138	1225	1321	DC 40
c4	684	740	842	891	1241	1092	1050	1135	1228	DC 40
c5	899	959	978	1056	1397	1219	1255	1329	1408	DC 40
c6	679	743	748	807	1140	957	983	1043	1102	DC 40
c7	661	724	727	822	1137	965	981	1031	1126	DC 40
c8	566	618	632	720	1005	861	863	911	1001	DC 40
c9	454	505	544	608	936	838	786	814	878	DC 40
c10	378	410	431	485	801	693	632	652	705	DC 40
c11	-	-	837	933	1286	672	607	621	665	DC 40
c12	-	-	-	-	-	585	522	531	570	DC 40
C1	900	900	1000	1100	1200	1200	1200	1300	1400	DC 60
C2	750	750	850	950	1000	1050	1100	1150	1250	DC 60
C3	750	750	800	900	950	950	1050	1100	1200	DC 60
C4	600	600	650	700	750	750	850	900	950	DC 60
C5	2900	2900	500	550	600	650	600	650	700	DC 60
C6	-	-	-	-	-	550	500	550	600	DC 60
CI	2900	2900	3250	3600	3850	4050	4200	4450	4800	DC 100
CII	2450	2450	2950	3250	3500	3800	3800	4050	4400	DC 100
CIII	-	-	2900	3200	3400	3600	3800	4050	4400	DC 100
br1	970	973	1030	1114	1260	1475	1333	1394	1523	DC 40
br2	748	814	861	930	1067	1295	1134	1185	1299	DC 40
br3	748	742	786	849	978	1194	1035	1084	1192	DC 40
br4	680	758	796	849	970	1148	1068	1109	1207	DC 40
br5	900	649	680	722	838	1021	929	961	1052	DC 40
br6	685	652	685	734	844	1001	918	955	1048	DC 40
br7	672	636	736	682	871	1096	999	1025	1148	DC 40
br8	577	524	583	502	694	930	819	833	946	DC 40
br9	470	550	536	475	644	854	753	767	875	DC 40
br10	389	454	505	479	601	810	710	766	868	DC 40
br11	-	449	429	392	515	720	619	673	771	DC 40
br12	-	369	456	443	549	723	645	701	797	DC 40
br13	900	344	374	380	437	645	559	604	690	DC 40
br14	750	-	320	326	374	554	470	512	593	DC 40
br15	750	-	-	-	-	520	456	496	571	DC 40
BR1	600	1050	1150	1250	1350	1350	1450	1550	1650	DC 60
BR2	2900	900	1000	1100	1200	1250	1250	1350	1450	DC 60
BR3	-	1000	1050	1250	1250	1250	1300	1400	1500	DC 60
BR4	2900	900	1000	1150	1200	1200	1250	1300	1400	DC 60
BR5	2450	900	1900	2100	2300	2400	2400	2550	2750	DC 60
BRI	-	1150	1300	1400	1500	1600	1600	1700	1850	DC 100
BRII		850	1000	1100	1200	1300	1250	1350	1450	Dc 100
BrMain		2465	2715	2965	3315	3115	3315	3465	3665	DC 161