
 AlazarTech Calibration and Verification Utility for ATS Class Waveform Digitizers
 Version 1.2 of November 1, 2003

Serial Number : S100132

 ATS850 DC Calibration Verification
 Verification Date: Sat Nov 08 21:38:42 2003

CHANNEL	FS RANGE	INPUT IN mV	MEASURED mV	ERROR PERCENT	RESULT
CH A	20mV	0.000000	-0.046094	-0.230469%	PASS
CH A	20mV	15.000000	14.675000	-1.625000%	PASS
CH A	20mV	-15.000000	-14.859375	0.703125%	PASS
CH A	40mV	0.000000	-0.104687	-0.261719%	PASS
CH A	40mV	30.000000	30.051562	0.128906%	PASS
CH A	40mV	-30.000000	-30.335938	-0.839844%	PASS
CH A	50mV	0.000000	-0.115234	-0.230469%	PASS
CH A	50mV	37.500000	37.615234	0.230469%	PASS
CH A	50mV	-37.500000	-37.988281	-0.976563%	PASS
CH A	80mV	0.000000	-0.253125	-0.316406%	PASS
CH A	80mV	60.000000	59.812500	-0.234375%	PASS
CH A	80mV	-60.000000	-60.406250	-0.507813%	PASS
CH A	100mV	0.000000	-0.257812	-0.257812%	PASS
CH A	100mV	75.000000	74.730469	-0.269531%	PASS
CH A	100mV	-75.000000	-75.402344	-0.402344%	PASS
CH A	200mV	0.000000	-0.382813	-0.191406%	PASS
CH A	200mV	150.000000	148.867188	-0.566406%	PASS
CH A	200mV	-150.000000	-149.929688	0.035156%	PASS
CH A	400mV	0.000000	-0.656250	-0.164062%	PASS
CH A	400mV	300.000000	296.343750	-0.914062%	PASS
CH A	400mV	-300.000000	-298.640625	0.339844%	PASS
CH A	500mV	0.000000	-0.898438	-0.179688%	PASS
CH A	500mV	375.000000	372.812500	-0.437500%	PASS
CH A	500mV	-375.000000	-375.546875	-0.109375%	PASS
CH A	800mV	0.000000	-1.406250	-0.175781%	PASS
CH A	800mV	600.000000	595.531250	-0.558594%	PASS
CH A	800mV	-600.000000	-600.156250	-0.019531%	PASS
CH A	1 V	0.000000	-2.187500	-0.218750%	PASS
CH A	1 V	750.000000	738.632812	-1.136719%	PASS
CH A	1 V	-750.000000	-746.953125	0.304688%	PASS
CH A	2 V	0.000000	-4.609375	-0.230469%	PASS
CH A	2 V	1500.000000	1481.562500	-0.921875%	PASS
CH A	2 V	-1500.000000	-1499.687500	0.015625%	PASS
CH A	4 V	0.000000	-3.125000	-0.078125%	PASS
CH A	4 V	3000.000000	3012.812500	0.320313%	PASS
CH A	4 V	-3000.000000	-3044.375000	-1.109375%	PASS
CH A	5 V	0.000000	-8.593750	-0.171875%	PASS
CH A	5 V	3750.000000	3686.328125	-1.273438%	PASS
CH A	5 V	-3750.000000	-3721.289063	0.574219%	PASS
CH A	8 V	0.000000	-13.437500	-0.167969%	PASS
CH A	8 V	6000.000000	5994.062500	-0.074219%	PASS
CH A	8 V	-6000.000000	-6042.187500	-0.527344%	PASS
CH A	10 V	0.000000	-16.015625	-0.160156%	PASS
CH A	10 V	7500.000000	7509.765625	0.097656%	PASS
CH A	10 V	-7500.000000	-7592.187500	-0.921875%	PASS
CH A	20 V	0.000000	-25.781250	-0.128906%	PASS
CH A	20 V	15000.000000	15046.875000	0.234375%	PASS
CH A	20 V	-15000.000000	-15176.562500	-0.882812%	PASS

CH B	20mV	0.000000	0.083594	0.417969%	PASS
CH B	20mV	15.000000	14.858594	-0.707031%	PASS
CH B	20mV	-15.000000	-14.802344	0.988281%	PASS
CH B	40mV	0.000000	0.045313	0.113281%	PASS
CH B	40mV	30.000000	29.871875	-0.320312%	PASS
CH B	40mV	-30.000000	-29.864062	0.339844%	PASS
CH B	50mV	0.000000	0.042969	0.085938%	PASS
CH B	50mV	37.500000	37.460938	-0.078125%	PASS
CH B	50mV	-37.500000	-37.437500	0.125000%	PASS
CH B	80mV	0.000000	-0.003125	-0.003906%	PASS
CH B	80mV	60.000000	59.550000	-0.562500%	PASS
CH B	80mV	-60.000000	-59.684375	0.394531%	PASS
CH B	100mV	0.000000	0.027344	0.027344%	PASS
CH B	100mV	75.000000	74.234375	-0.765625%	PASS
CH B	100mV	-75.000000	-74.300781	0.699219%	PASS
CH B	200mV	0.000000	-0.164063	-0.082031%	PASS
CH B	200mV	150.000000	150.820313	0.410156%	PASS
CH B	200mV	-150.000000	-151.375000	-0.687500%	PASS
CH B	400mV	0.000000	0.000000	0.000000%	PASS
CH B	400mV	300.000000	301.171875	0.292969%	PASS
CH B	400mV	-300.000000	-302.468750	-0.617188%	PASS
CH B	500mV	0.000000	-0.136719	-0.027344%	PASS
CH B	500mV	375.000000	372.109375	-0.578125%	PASS
CH B	500mV	-375.000000	-373.183594	0.363281%	PASS
CH B	800mV	0.000000	-0.218750	-0.027344%	PASS
CH B	800mV	600.000000	597.718750	-0.285156%	PASS
CH B	800mV	-600.000000	-599.156250	0.105469%	PASS
CH B	1 V	0.000000	0.234375	0.023438%	PASS
CH B	1 V	750.000000	743.906250	-0.609375%	PASS
CH B	1 V	-750.000000	-744.921875	0.507813%	PASS
CH B	2 V	0.000000	0.156250	0.007812%	PASS
CH B	2 V	1500.000000	1500.625000	0.031250%	PASS
CH B	2 V	-1500.000000	-1504.609375	-0.230469%	PASS
CH B	4 V	0.000000	-1.562500	-0.039062%	PASS
CH B	4 V	3000.000000	2989.843750	-0.253906%	PASS
CH B	4 V	-3000.000000	-2998.125000	0.046875%	PASS
CH B	5 V	0.000000	-1.171875	-0.023438%	PASS
CH B	5 V	3750.000000	3750.195313	0.003906%	PASS
CH B	5 V	-3750.000000	-3756.250000	-0.125000%	PASS
CH B	8 V	0.000000	1.250000	0.015625%	PASS
CH B	8 V	6000.000000	6059.687500	0.746094%	PASS
CH B	8 V	-6000.000000	-6065.312500	-0.816406%	PASS
CH B	10 V	0.000000	-1.171875	-0.011719%	PASS
CH B	10 V	7500.000000	7475.390625	-0.246094%	PASS
CH B	10 V	-7500.000000	-7479.296875	0.207031%	PASS
CH B	20 V	0.000000	3.125000	0.015625%	PASS
CH B	20 V	15000.000000	15000.781250	0.003906%	PASS
CH B	20 V	-15000.000000	-15017.968750	-0.089844%	PASS

ATS850 Frequency Response Verification
Version 1.2 of November 1, 2003
Verification Date: Sat Nov 08 21:42:22 2003

CH A, ATT OFF, 1 MOhms, DC Coupling

10MHz	600.000000	605.037687	0.839614%	10.000000	Max.	-10.000000	Min.	PASS
5MHz	600.000000	608.228664	1.371444%	10.000000	Max.	-10.000000	Min.	PASS
1MHz	600.000000	591.626342	-1.395610%	10.000000	Max.	-10.000000	Min.	PASS
500KHz	600.000000	595.188494	-0.801918%	10.000000	Max.	-10.000000	Min.	PASS
100KHz	600.000000	593.811867	-1.031355%	10.000000	Max.	-10.000000	Min.	PASS
20KHz	600.000000	594.997251	-0.833792%	10.000000	Max.	-10.000000	Min.	PASS
1KHz	600.000000	592.651134	-1.224811%	10.000000	Max.	-10.000000	Min.	PASS
100Hz	600.000000	591.839133	-1.360144%	10.000000	Max.	-10.000000	Min.	PASS
10MHz	600.000000	593.811058	-1.031490%	10.000000	Max.	-10.000000	Min.	PASS

CH A, ATT OFF, 1 MOhms, AC Coupling

10MHz	600.000000	603.189485	0.531581%	10.000000	Max.	-10.000000	Min.	PASS
5MHz	600.000000	606.338702	1.056450%	10.000000	Max.	-10.000000	Min.	PASS
1MHz	600.000000	589.800185	-1.699969%	10.000000	Max.	-10.000000	Min.	PASS
500KHz	600.000000	593.537097	-1.077151%	10.000000	Max.	-10.000000	Min.	PASS
100KHz	600.000000	592.100041	-1.316660%	10.000000	Max.	-10.000000	Min.	PASS
20KHz	600.000000	593.098610	-1.150232%	10.000000	Max.	-10.000000	Min.	PASS
1KHz	600.000000	590.641431	-1.559762%	10.000000	Max.	-10.000000	Min.	PASS
100Hz	600.000000	588.024538	-1.995910%	10.000000	Max.	-10.000000	Min.	PASS
10MHz	600.000000	475.981764	-20.669706%	-10.000000	Max.	-30.000000	Min.	PASS

CH A, ATT OFF, 50 Ohms, DC Coupling

10MHz	600.000000	602.273411	0.378902%	10.000000	Max.	-10.000000	Min.	PASS
5MHz	600.000000	598.897328	-0.183779%	10.000000	Max.	-10.000000	Min.	PASS
1MHz	600.000000	592.292709	-1.284548%	10.000000	Max.	-10.000000	Min.	PASS
500KHz	600.000000	596.064184	-0.655969%	10.000000	Max.	-10.000000	Min.	PASS
100KHz	600.000000	597.879911	-0.353348%	10.000000	Max.	-10.000000	Min.	PASS
20KHz	600.000000	598.425095	-0.262484%	10.000000	Max.	-10.000000	Min.	PASS
1KHz	600.000000	596.356916	-0.607181%	10.000000	Max.	-10.000000	Min.	PASS
100Hz	600.000000	595.482054	-0.752991%	10.000000	Max.	-10.000000	Min.	PASS
10MHz	600.000000	578.594470	-3.567588%	10.000000	Max.	-10.000000	Min.	PASS

CH A, ATT OFF, 50 Ohms, AC Coupling

10MHz	600.000000	601.605036	0.267506%	10.000000	Max.	-10.000000	Min.	PASS
5MHz	600.000000	598.219927	-0.296679%	10.000000	Max.	-10.000000	Min.	PASS
1MHz	600.000000	589.592998	-1.734500%	10.000000	Max.	-10.000000	Min.	PASS
500KHz	600.000000	587.879503	-2.020083%	10.000000	Max.	-10.000000	Min.	PASS
100KHz	600.000000	474.190997	-20.968167%	-10.000000	Max.	-30.000000	Min.	PASS

CH A, ATT ON, 1 MOhms, DC Coupling

10MHz	1200.000000	1281.455109	6.787926%	10.000000	Max.	-10.000000	Min.	PASS
5MHz	1200.000000	1270.776144	5.898012%	10.000000	Max.	-10.000000	Min.	PASS
1MHz	1200.000000	1253.761309	4.480109%	10.000000	Max.	-10.000000	Min.	PASS
500KHz	1200.000000	1245.411990	3.784333%	10.000000	Max.	-10.000000	Min.	PASS
100KHz	1200.000000	1198.179492	-0.151709%	10.000000	Max.	-10.000000	Min.	PASS
20KHz	1200.000000	1188.911989	-0.924001%	10.000000	Max.	-10.000000	Min.	PASS
1KHz	1200.000000	1187.529091	-1.039242%	10.000000	Max.	-10.000000	Min.	PASS
100Hz	1200.000000	1186.243141	-1.146405%	10.000000	Max.	-10.000000	Min.	PASS
10MHz	1200.000000	1199.493505	-0.042208%	10.000000	Max.	-10.000000	Min.	PASS

CH A, ATT ON, 1 MOhms, AC Coupling

10MHz	1200.000000	1279.792712	6.649393%	10.000000	Max.	-10.000000	Min.	PASS
5MHz	1200.000000	1268.779345	5.731612%	10.000000	Max.	-10.000000	Min.	PASS
1MHz	1200.000000	1252.230359	4.352530%	10.000000	Max.	-10.000000	Min.	PASS
500KHz	1200.000000	1243.649469	3.637456%	10.000000	Max.	-10.000000	Min.	PASS
100KHz	1200.000000	1200.406069	0.033839%	10.000000	Max.	-10.000000	Min.	PASS
20KHz	1200.000000	1186.129760	-1.155853%	10.000000	Max.	-10.000000	Min.	PASS
1KHz	1200.000000	1185.291686	-1.225693%	10.000000	Max.	-10.000000	Min.	PASS
100Hz	1200.000000	1179.743014	-1.688082%	10.000000	Max.	-10.000000	Min.	PASS
10MHz	1200.000000	972.865471	-18.927877%	-10.000000	Max.	-30.000000	Min.	PASS

CH A, ATT ON, 50 Ohms, DC Coupling							
10MHz	1200.000000	1238.390867	3.199239%	10.000000	Max.	-10.000000	Min. PASS
5MHz	1200.000000	1236.059225	3.004935%	10.000000	Max.	-10.000000	Min. PASS
1MHz	1200.000000	1247.324554	3.943713%	10.000000	Max.	-10.000000	Min. PASS
500KHz	1200.000000	1246.263875	3.855323%	10.000000	Max.	-10.000000	Min. PASS
100KHz	1200.000000	1215.098622	1.258218%	10.000000	Max.	-10.000000	Min. PASS
20KHz	1200.000000	1199.237327	-0.063556%	10.000000	Max.	-10.000000	Min. PASS
1KHz	1200.000000	1193.935149	-0.505404%	10.000000	Max.	-10.000000	Min. PASS
100Hz	1200.000000	1192.782428	-0.601464%	10.000000	Max.	-10.000000	Min. PASS
10MHz	1200.000000	1222.780021	1.898335%	10.000000	Max.	-10.000000	Min. PASS
CH A, ATT ON, 50 Ohms, AC Coupling							
10MHz	1200.000000	1237.305017	3.108751%	10.000000	Max.	-10.000000	Min. PASS
5MHz	1200.000000	1234.594200	2.882850%	10.000000	Max.	-10.000000	Min. PASS
1MHz	1200.000000	1242.072199	3.506017%	10.000000	Max.	-10.000000	Min. PASS
500KHz	1200.000000	1229.518656	2.459888%	10.000000	Max.	-10.000000	Min. PASS
100KHz	1200.000000	970.230849	-19.147429%	-10.000000	Max.	-30.000000	Min. PASS
CH B, ATT OFF, 1 MOhms, DC Coupling							
10MHz	600.000000	608.029589	1.338265%	10.000000	Max.	-10.000000	Min. PASS
5MHz	600.000000	610.837513	1.806252%	10.000000	Max.	-10.000000	Min. PASS
1MHz	600.000000	592.555941	-1.240676%	10.000000	Max.	-10.000000	Min. PASS
500KHz	600.000000	596.530445	-0.578259%	10.000000	Max.	-10.000000	Min. PASS
100KHz	600.000000	594.967489	-0.838752%	10.000000	Max.	-10.000000	Min. PASS
20KHz	600.000000	596.189133	-0.635144%	10.000000	Max.	-10.000000	Min. PASS
1KHz	600.000000	592.828000	-1.195333%	10.000000	Max.	-10.000000	Min. PASS
100Hz	600.000000	593.036604	-1.160566%	10.000000	Max.	-10.000000	Min. PASS
10MHz	600.000000	591.721672	-1.379721%	10.000000	Max.	-10.000000	Min. PASS
CH B, ATT OFF, 1 MOhms, AC Coupling							
10MHz	600.000000	606.811930	1.135322%	10.000000	Max.	-10.000000	Min. PASS
5MHz	600.000000	609.155747	1.525958%	10.000000	Max.	-10.000000	Min. PASS
1MHz	600.000000	590.840347	-1.526609%	10.000000	Max.	-10.000000	Min. PASS
500KHz	600.000000	594.317690	-0.947052%	10.000000	Max.	-10.000000	Min. PASS
100KHz	600.000000	593.186732	-1.135545%	10.000000	Max.	-10.000000	Min. PASS
20KHz	600.000000	594.363863	-0.939356%	10.000000	Max.	-10.000000	Min. PASS
1KHz	600.000000	591.674441	-1.387593%	10.000000	Max.	-10.000000	Min. PASS
100Hz	600.000000	589.152080	-1.807987%	10.000000	Max.	-10.000000	Min. PASS
10MHz	600.000000	469.558190	-21.740302%	-10.000000	Max.	-30.000000	Min. PASS
CH B, ATT OFF, 50 Ohms, DC Coupling							
10MHz	600.000000	606.030838	1.005140%	10.000000	Max.	-10.000000	Min. PASS
5MHz	600.000000	601.661721	0.276953%	10.000000	Max.	-10.000000	Min. PASS
1MHz	600.000000	592.553559	-1.241073%	10.000000	Max.	-10.000000	Min. PASS
500KHz	600.000000	597.252187	-0.457969%	10.000000	Max.	-10.000000	Min. PASS
100KHz	600.000000	598.615511	-0.230748%	10.000000	Max.	-10.000000	Min. PASS
20KHz	600.000000	599.328161	-0.111973%	10.000000	Max.	-10.000000	Min. PASS
1KHz	600.000000	596.488967	-0.585172%	10.000000	Max.	-10.000000	Min. PASS
100Hz	600.000000	596.475575	-0.587404%	10.000000	Max.	-10.000000	Min. PASS
10MHz	600.000000	598.553197	-0.241134%	10.000000	Max.	-10.000000	Min. PASS
CH B, ATT OFF, 50 Ohms, AC Coupling							
10MHz	600.000000	605.007990	0.834665%	10.000000	Max.	-10.000000	Min. PASS
5MHz	600.000000	600.909536	0.151589%	10.000000	Max.	-10.000000	Min. PASS
1MHz	600.000000	590.492322	-1.584613%	10.000000	Max.	-10.000000	Min. PASS
500KHz	600.000000	588.605968	-1.899005%	10.000000	Max.	-10.000000	Min. PASS
100KHz	600.000000	479.340520	-20.109913%	-10.000000	Max.	-30.000000	Min. PASS
CH B, ATT ON, 1 MOhms, DC Coupling							
10MHz	1200.000000	1244.471882	3.705990%	10.000000	Max.	-10.000000	Min. PASS
5MHz	1200.000000	1233.596075	2.799673%	10.000000	Max.	-10.000000	Min. PASS
1MHz	1200.000000	1215.934398	1.327866%	10.000000	Max.	-10.000000	Min. PASS
500KHz	1200.000000	1209.616997	0.801416%	10.000000	Max.	-10.000000	Min. PASS
100KHz	1200.000000	1199.906206	-0.007816%	10.000000	Max.	-10.000000	Min. PASS
20KHz	1200.000000	1203.730595	0.310883%	10.000000	Max.	-10.000000	Min. PASS
1KHz	1200.000000	1199.174088	-0.068826%	10.000000	Max.	-10.000000	Min. PASS
100Hz	1200.000000	1197.696102	-0.191992%	10.000000	Max.	-10.000000	Min. PASS
10MHz	1200.000000	1187.369468	-1.052544%	10.000000	Max.	-10.000000	Min. PASS

CH B, ATT ON, 1 MOhms, AC Coupling							
10MHz	1200.000000	1243.079549	3.589962%	10.000000	Max.	-10.000000	Min. PASS
5MHz	1200.000000	1232.068528	2.672377%	10.000000	Max.	-10.000000	Min. PASS
1MHz	1200.000000	1213.358190	1.113183%	10.000000	Max.	-10.000000	Min. PASS
500KHz	1200.000000	1206.125317	0.510443%	10.000000	Max.	-10.000000	Min. PASS
100KHz	1200.000000	1196.536036	-0.288664%	10.000000	Max.	-10.000000	Min. PASS
20KHz	1200.000000	1199.851065	-0.012411%	10.000000	Max.	-10.000000	Min. PASS
1KHz	1200.000000	1197.503201	-0.208067%	10.000000	Max.	-10.000000	Min. PASS
100Hz	1200.000000	1191.766749	-0.686104%	10.000000	Max.	-10.000000	Min. PASS
10MHz	1200.000000	946.394945	-21.133755%	-10.000000	Max.	-30.000000	Min. PASS

CH B, ATT ON, 50 Ohms, DC Coupling							
10MHz	1200.000000	1205.249494	0.437458%	10.000000	Max.	-10.000000	Min. PASS
5MHz	1200.000000	1202.548842	0.212404%	10.000000	Max.	-10.000000	Min. PASS
1MHz	1200.000000	1211.480725	0.956727%	10.000000	Max.	-10.000000	Min. PASS
500KHz	1200.000000	1210.681475	0.890123%	10.000000	Max.	-10.000000	Min. PASS
100KHz	1200.000000	1205.089230	0.424102%	10.000000	Max.	-10.000000	Min. PASS
20KHz	1200.000000	1209.773760	0.814480%	10.000000	Max.	-10.000000	Min. PASS
1KHz	1200.000000	1204.716911	0.393076%	10.000000	Max.	-10.000000	Min. PASS
100Hz	1200.000000	1204.573119	0.381093%	10.000000	Max.	-10.000000	Min. PASS
10MHz	1200.000000	1190.456512	-0.795291%	10.000000	Max.	-10.000000	Min. PASS

CH B, ATT ON, 50 Ohms, AC Coupling							
10MHz	1200.000000	1204.541171	0.378431%	10.000000	Max.	-10.000000	Min. PASS
5MHz	1200.000000	1201.825216	0.152101%	10.000000	Max.	-10.000000	Min. PASS
1MHz	1200.000000	1206.503905	0.541992%	10.000000	Max.	-10.000000	Min. PASS
500KHz	1200.000000	1195.530337	-0.372472%	10.000000	Max.	-10.000000	Min. PASS
100KHz	1200.000000	970.033927	-19.163839%	-10.000000	Max.	-30.000000	Min. PASS

Session Closed at Sat Nov 08 21:51:15 2003