

Pioneer Coastal Profiler Mooring Power Schedule

Surface Buoy	Instrument Code	Power Schedule		Schedule in .cfg file	Instrument Sampling	Comments
		Interval	Duration			
Motion Pack	MOPAK	On continuously		0:xx:xx:xx Initial Power state on (1)	sample continuously at 10Hz while powered on	Engineering sensor 3DMGX3
Inductive Modem	IMM	On continuously		0:xx:xx:xx Initial Power state on (1)	N/A	Telemetry

Pioneer Wire Following Profiler Sampling Plan

calculated based on top and bottom stop values

	ISPM**	PMUI	PMCI	CNPM**	PMCO	OSPM	PMUO	Notes
Top Stop	23	23	23	23	23	23	23	induct termination + 1 m
Bottom Stop	71	71	104	114	126	414	426	induct termination - 1 m
Shallow Limit	28	28	28	28	28	28	28	top stop + 5 m
Deep Limit	66	66	99	109	121	409	421	bottom stop - 5 m
Water Depth	95	95	127	135	147	435*	450	*435m design adapted to 460m
Shallow error	10	10	13	14	15	40	40	approx 10% water depth
Deep error	10	10	13	14	15	40	40	approx 10% water depth
Profile A								
Profile Time	00:05:00	00:05:00	00:08:00	00:08:00	00:10:00	00:40:00	00:42:00	profile dist/(.20m/s) + 25%
Shallow limit	28	28	28	28	28	28	28	
Deep limit	66	66	99	109	121	409	421	
Direction	Up	Up	Up	Up	Up	Up	Up	
Telemetry	No	No	No	No	No	No	No	
Profile B								
Profile Time	00:05:00	00:05:00	00:08:00	00:08:00	00:10:00	00:19:00	00:19:00	
Shallow limit	28	28	28	28	28	28	28	
Deep limit	66	66	99	109	121	200	200	
Direction	Down	Down	Down	Down	Down	Down	Down	
Telemetry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Profile C								
Profile Time	N/A	N/A	N/A	N/A	N/A	00:19:00	00:19:00	
Shallow limit	N/A	N/A	N/A	N/A	N/A	28	28	
Deep limit	N/A	N/A	N/A	N/A	N/A	200	200	
Direction	N/A	N/A	N/A	N/A	N/A	Up	Up	
Telemetry	N/A	N/A	N/A	N/A	N/A	No	No	
Profile D								
Profile Time	N/A	N/A	N/A	N/A	N/A	00:40:00	00:42:00	
Shallow limit	N/A	N/A	N/A	N/A	N/A	28	28	
Deep limit	N/A	N/A	N/A	N/A	N/A	409	421	
Direction	N/A	N/A	N/A	N/A	N/A	Down	Down	
Telemetry	N/A	N/A	N/A	N/A	N/A	Yes	Yes	
Pattern								
	A,B	A,B	A,B	A,B	A,B	A,B,C,D	A,B,C,D	
Duration A	1:30	1:30	1:30	1:30	1:30	3:00	3:00	
Duration B	1:30	1:30	1:30	1:30	1:30	3:00	3:00	
Duration C	N/A	N/A	N/A	N/A	N/A	3:00	3:00	
Duration D	N/A	N/A	N/A	N/A	N/A	3:00	3:00	

** Winter only deployments

Pioneer Profiler Mooring ADCP configurations

Initial approach targeted ~4 bins past surface. Revised site depths, OSPM variants, etc result in ~3-5 bins (row 35)
 (OSPM configured the same as PMUO (number of bins) even though transducer is ~20 m shallower)

Description	Command Code	PMUI	ISPM**	PMCI	CNPM**	PMCO	PMUO	OSPM	Notes
Class-Series		ADCPT-G	ADCPT-G	ADCPT-G	ADCPT-G	ADCPT-G	ADCPS-L	ADCPS-L	
model		Q-master	Q-master	Q-master	Q-master	Q-master	L-Ranger	L-Ranger	
frequency		150	150	150	150	150	75	75	[1]
batt packs		2	2	2	2	2	4	4	[1]
bandwidth	WB	BB	BB	BB	BB	BB	NB	NB	[2]
data out	PD	PD12	PD12	PD12	PD12	PD12	PD12	PD12	[3]
duration (mo)		7	7	7	7	7	7	7	
duration (dy)		210	210	210	210	210	210	210	
ens int (min)	TE	30	30	30	30	30	60	60	[4]
ping int (sec)	TP	2	2	2	2	2	2.5	2.5	
pings per ens	WP	90	90	90	90	90	72	72	
ens dur (min)		3	3	3	3	3	3	3	
fixed salinity	ES	33	33	34	35	35	35	35	
temp		5	5	5	5	5	5	5	
water depth		95	95	127	135	147	450	435	
dZ off bottom		20	20	20	20	23	23	20	
transd depth	ED (in dm)	75	75	107	115	124	427	415	
blank	WF (in cm)	4.12	4.12	4.12	4.12	4.12	7.42	7.42	
dz 1st bin		9	9	9	9	9	17	17	[5]
bin size	WS	4	4	4	4	4	8	8	
no bins	WN	21	21	29	32	35	56	56	
prof range		80	80	112	124	136	440	440	[5]
1st bin		66	66	98	106	115	410	398	
last bin		-14	-14	-14	-18	-21	-30	-42	
bins past surf		3.5	3.5	3.5	4.5	5.25	3.75	5.25	
batt pack used		1.1	1.1	1.1	1.1	1.2	3.9	3.9	[5]
vel prec (cm/s)		0.74	0.74	0.74	0.74	0.74	1.72	1.72	[5]

** Winter only deployments
 calculated value

- Notes:**
- [1] Alkaline battery packs, 450 Wh each
 - [2] WB0 = BB = BroadBand, WB1 = NB = NarrowBand
 - [3] PD12 = reduced record for inductive telemetry, PD8 = full data in ASCII
 - [4] "As-deployed" values, previously known as default
 - [5] should match PlanADCP values