

Enter Your Equipment Profile Description:

Aluminum 80	NITROX	Aluminum Back Plate	Shortie
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Goals: to keep the rig floating on the surface
to keep the diver floating on the surface with the head above the water
to compensate for any negative change in buoyancy while underwater
to choose the right amount of lead - to be *neutral at safety stop*

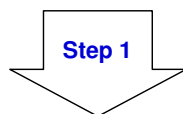
Start with **Step 1** and have a safe dive!

no edits here	Result table	predive	start	depth1	depth2	3m end	postdive
	Above Water	-10.0	0.0	0.0	0.0	0.0	-10.0
	Suit	5.0	5.0	2.0	2.0	5.0	5.0
	Tank(s)	-5.7	-5.7	-5.7	-1.9	-1.9	-1.9
	Non-Buoyant Gear	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5
	Lead	0.0	0.0	0.0	0.0	0.0	0.0
	Light	0.0	0.0	0.0	0.0	0.0	0.0
	Rig Total	-13.2	-13.2	-13.2	-9.4	-9.4	-9.4
		-18.2	-8.2	-11.2	-7.4	-4.4	-14.4

end-dive buoyancy @ 3m

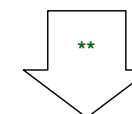
Updates
- added 'Integrated' field for weight integrated (weight on BC) vs not setups
- added 'Doubles' field for easy switching. Put extra weight next to it.
11/12/2010 - several new fields for warm water divers/photographers and minor design changes (Thanks Gary "Insta-Gator" Shull")

0 (positive number equals positive buoyancy)
-4.4 Would be negatively buoyant at 3m
0.068 Volume required to be neutral (cubic feet)



Need lift: 18.15#
Need lead: 0#

Wing or BCD Lift Required
Lead Weight Required



Enter net Buoyancy ("-" negative sinks, "+" positive floats)

Input here	Head weight	-10	(part to keep above water)
	Tank full	-5.7	
	Tank End of Dive	-1.9	
	Exposure Suit	5	2 (compressed @ depth)
	Non-Buoyant Gear **	-7.45	
	Camera / Housing	0	
	Doubles?	No	Extra: 0 (manifold, bands...)
	Integrated Weights?	No	(important for rig flotation)
	Anticipated gas usage %	80%	

Feel free to experiment with various setting in the input area (1). The results will show in the area (2). You can make some interesting observation! This sheet is protected to prevent accidental changes.

Enter measured weight if Non-buoyant

* Non-Buoyant Gear	#lbs
Back Plate	1.7
Regulator / Octopus	5
Light	0.5
Knife	0.25
Other	0
Total	7.45

Tanks (e.g.)	HP80	HP100	HP120	LP80	LP95	LP120	AL80	ALN80	AL100
Full Tank	-9	-10	-11	-6	-8	-9	-1.4	-5.7	-4.3
empty	-3	-2.5	-2	0	-1	1	3.4	-0.9	1.9
delta	6	7.5	9	6	7	10	4.8	4.8	6.2
End of Dive	-4.2	-4.0	-3.8	-1.2	-2.4	-1.0	2.4	-1.9	0.7

predive and postdive are actually surface swims, pick how much you want to stick out of water. 10# is an average head weight.
keeping the rig afloat at the beginning of the dive (on the surface) requires the most lift.
you should have enough lead to be neutrally buoyant at the safety stop.
for some tropical suits (less than 8-10# buoyant) select an AL BP/AL80/lighter light