

# The Quest for Perfect Buoyancy

For many divers, perfect buoyancy is a lifetime quest for a nirvana where they have acquired the gift of remaining completely motionless in the ocean in any position, relaxed, effortlessly neutral, a passive observer instead of a harbinger of doom for the marine life around them.

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**Does this describe** someone you know? Here are five tips to help you on your way to your own personal neutral nirvana.

## 1. Lose That Weight

The number one reason why many people find it difficult to attain perfect buoyancy is that they dive over-weighted and have to compensate for this by adding unnecessary air to their BCD. The excess air moves around within the cell as they swim and change position in the water and this makes it very hard for them to maintain their balance.

It also means they cannot become horizontal in the water as the weight around their waist carries their legs down while the air in their BCDs is around their shoulders and lifts their head up. It is this phenomenon that gives new divers that less-than-attractive seahorse posture.

How do you know if you are carrying too much? At the end of a dive when you have 50 bar or so in your cylinder, position yourself at safety stop depth, three to five metres, remove all the air from your BCD and try to remain neutrally buoyant. If you find yourself sinking and have to add air to your BCD to remain neutral you are carrying too much weight so get rid of it. If you find yourself tending to float to the surface then you are not carrying enough weight. Easy!

Mini-tip: if you have a lot on your belt and you worry that if you ever lost it you would be in risk of a runaway ascent, spread the weight about. Slide a kilo on your tank cam band, add small weight pouches to your harness or get a BCD with integral weight pockets. But don't attach too much weight in places where it can't be dumped. You would still need to be able to swim to the surface and keep yourself afloat there in the event your BCD were ever to fail.

## 2. Get Well-Acquainted with Your BCD

Once you are weighted correctly you only need to make small adjustments to your BCD from time to time primarily to compensate for the effect of changing depth and pressure on your wetsuit. But this fine-tuning is an advanced skill in itself and requires that you know your BCD well.

Spend time studying it, hold it up in front of you, turn it around and imagine where the air sits in the BCD when you are underwater. It will always gravitate to whichever part of your BCD is closest to the surface. Ask yourself which way you would need to turn your body in different situations so that the air is close to one of the pull-dumps and you can release it.

Learn where the controls are and practice using your BCD in a variety of situations until it becomes instinctive. For example, pretend you are in an environment such as a wreck or a cavern where you cannot make yourself vertical in the water and practice what you would do in such circumstances; roll your right shoulder down so your left shoulder is uppermost and use the pull-dump or dip your head and use your "tail dump", would be my suggestions.

Remember, if your inflator hose is on your left shoulder and, while underwater, you raise it above your head to release the air, this will only work if your left shoulder is the part of your body closest to the water's surface. Otherwise air will remain trapped within the BCD no matter how fiercely you depress the button.

Finally, learn how to vent your BCD completely; you would be surprised how many divers fail to do this and consequently add unnecessary weight to their belt in order to descend giving themselves the problems we discussed in Tip One above.

