Although the term *waterproof* has been used for a long time, simply put, *its wrong*! The only thing that could be waterproof is a solid impenetrable object. Correctly put, a watch may be *water resistant* or *pressure resistant* to a variety of different degrees. Additionally, a variety of factors may have an effect on the water resistance. First, lets explain what the various terms mean.

Water resistance (or pressure resistance) is measured in depth or atmospheres (sometimes referred to as "bar(s)"). These refer to "static pressure", *the pressure exerted on the seals when* <u>no motion is present</u>. Any motion on the watch (such as swimming or diving) can be a force multiplier. Essentially, this means that, for practical purposes, the watch cannot truly be used at the actual depth specified. Typically you should figure 1/10 of the rated depth for actual use.

Pressure Resitance Equivalencies

	<u>Casual</u> Moisture	Swimming	<u>Skin</u> Diving	<u>Scuba</u> Diving	<u>Deep</u> Diving
Atmospheres/ Bar	3	5	10	20	30+
<u>Meters</u>	30	50	100	200	300+
Feet	100	165	330	660	1000+

1 Atmosphere = 1 bar = 1 meter = 3.3 feet

Using certain functions under water may invalidate any water resistancy. For example, in most cases, pushbuttons cannot and should not be used under water. Additionally, if the watch has a screw-down crown, it should be properly secured. This does not mean using all possible human strength to tighten it down. Doing so may actually work counter to the purpose as you may begin tearing instead of compressing gaskets. Always follow the watch manufacturer's instructions.

For some watches, particularly those intended for diving, a one-way valve is provided on the case so the case, which withstood the high pressure, should allow the excess pressure to escape as depth decreases.

Because a watch started out rated for a particular depth, doesn't mean it will always stay that way. Gaskets and some cases deteriorate over time due to wear and tear, exposure to ultraviolet light or chemicals (including chlorine in a pool or the salt of the ocean), excessive accumulation of dirt and grime, accidental damage or having been improperly closed after a battery change (just to name a few). No one can warrant that a seal is good unless they have the equipment to

test it. Use common sense. Also remember that pressure resistance is not corrosion resistance. Just as you would rinse your own skin after exiting a pool or the ocean, an appropriately water resistant watch should also be rinsed.