Outdoor



# **Watch out!**

## Watches can outsmart you

owadays, watches used in films like '007' and 'Gadget Boy' no longer seem that far-fetched.

Sportsmen have stopped buying watches solely to keep time, but rather use them as fitness training tools that can record heart rate, speed, distance, and other useful workout data. Outdoor watches also incorporate all the tools that a fisherman, sailor, mountaineer or diver might require in one compact high-tech gadget.

Some watches are designed to be used with monitoring instruments like a foot POD, heart rate monitor, Bike POD or GPS POD, others are incorporated into equipment used in the outdoors, like cliffhanging clips or trekking poles.

You name a sport or activity, and there will be a watch to enhance your performance.

#### Selling points

All these wonderful options can, however, become very confusing when selecting a watch. There are a few general points that a retailer could point out to a prospective buyer.

Weight: A lot of technology can make a watch heavy enough to hammer in tent pins, and extra weight on the arm is not an attractive option when you are trekking for long hours. Many manufacturers therefore opt to decrease weight wherever they can, for ex-

ample, by using materials like resin, fabric, rubber, silicon, aluminium, titanium, canvas, etc to reduce the overall weight. The weights of sports and outdoor watches can therefore vary from 40g to 2kg.

Robust: A watch used for rigorous activities should also be corrosion and abrasion resistant, shock resistant and dirt and mud resistant.

The temperature the watch would be exposed to should also be born in mind. Some watches are temperature resistant up to a certain point — watches for snow sports and activities are highly specialised.

Solar power and tide graphs are other features that can attract outdoor people. Tide graphs are great for fishermen, surfers, yachtsmen, and anyone else interested in knowing the tidal movements of the ocean.

#### Use in water

Water resistant or water proof are also important features. If used for general outdoor activities, water resistant depth is not as important as it would be for divers, although outdoor adventurers are often exposed to the elements and therefore do not want an expensive watch that will be damaged in the first storm. A fisherman and outdoorsman who does not intend to go swimming or diving (not voluntarily,

in any case) will not need more than 30-50m water resistance, but if the customer intends to go for an occasional dip in the outdoors, persuade him or her to opt for a 100m water resistant rating — or higher — and advise them not to go scuba diving.

Many customers and retailers are confused about the meaning of water resistant and water proof. According to ISO standards (the International Organization for Standardization) the two terms essentially mean the same thing.

Some manufacturers make a distinction that water resistant means that the watch would work under water (you can see it's reading etc) but water proof means that you can actually press the buttons and change the settings on the watch under water. That means the difference between watches that can withstand the pressure to a certain level, and watches that can operate to that level.

Other brands will tell you that there is a vast difference between water resistant and water proof — water resistant will allow water to come into contact with the watch and water-proof will allow the watch to be submerged.

The important part is the ISO rating and to understand what tests the watch has/has not undergone to achieve that ISO rating.

The "depth" quoted by all watch manufac-

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turers in their claims about water resistance has nothing to do with the physical water depth, but is instead indicative of the static pressure used during a successful pressure test as prescribed by the ISO. Therefore, a watch might be marked as water resistant up to 100m, but this does not take the watch's resistance to pressure, shock or corrosion into account, which would be factors that could affect the watch's performance in real life conditions.

Manufacturers design water resistant watches with a specific water sport in mind and thus determine the water resistance of the product in accordance to the ISO standards of water resistance.

Divers watches must be marked as ISO DIV-ER's watches and must have passed the ISO 6425 pressure and depth tests. These watches would have undergone strenuous tests and will be suited for use by professional divers diving for extended periods of time.

As a general rule, the following water depths can be applied to water sports:

- Water resistant 30-50m: suitable for water related work and fishing. NOT suitable for swimming or diving.
- Water resistant 100m: suitable for recreational surfing, swimming, snorkelling, sailing and water sports. NOT suitable for diving.
- Water resistant 200m: suitable for professional marine activity and serious surface water sports. NOT suitable for diving.
- Diver's 100m: minimum ISO standard (ISO 6425) for scuba diving at depths NOT requiring helium gas. Diver's 100m and 150m watches

are generally old(er) watches.

- Diver's 200m or 300m: suitable for scuba diving at depths NOT requiring helium gas. Typical ratings for contemporary diver's watches.
- Diver's 300+ m helium safe: suitable for saturation diving (helium enriched environment). Watches designed for helium mixed-gas diving will have additional markings to point this out.

Other things to consider when selling a customer a diving watch:

• Does the watch have extra underwater durability enhancements — such as hardened glass on the watch face and waterproof watch straps and buttons?

• Visibility, depending on the depth and the murkiness of the water, could deteriorate under water — therefore it is a good idea to suggest a light-up dial and hands watch suited to diving.

#### **Hikers/ climbers**

The ideal climber's watch would have a barometer to calculate atmospheric air pressure; notify the wearer of an approaching storm (some barometers have a storm alarm); a thermometer that reads the temperature for the day and can give predictions for upcoming days; an altimeter that can track the climber's progress; water resistance of at least 30m to be safe in rainy conditions and, of course, a compass to spot check your route. A serious mountaineer

might want to opt for a watch with full navigational functions such as satellite connections, GPS or location finders and distance meters.

Outdoor enthusiasts who have to calculate accurate directions (like adventure racers or orienteers), a watch with declination values will be a great tool. The declination value refers to the difference (in degrees) between magnetic and true North. As compasses point to the magnetic North (a region above the earth where the



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you the degree value between true and magnetic North, also known as the declination value. This information helps you to adjust the compass with the relative declination value for true North.

Some watches allow trekking mountaineers to log all information about their trip — like their highest and lowest altitudinal points, their total ascent and descent information, air pressure, distance and directional values, GPS or satellite location points, their speed, the daily temperatures, the sunrise and sunset times and the phases of the moon on their watches' built-in calendars — and wirelessly transmit this data to a PC or Mac.

All this, whilst still being able to tell time!

This could be an invaluable tool for expedition leaders who need to update their trekking progress regularly and keep readers on social networks, blogs or websites updated.

#### **Training watches**

Sports watches are usually specially designed for aerobic training activities — walking, running, spinning, cycling — and are great tools for athletes engaged in these activities. Most sports watches are designed to be a digital personal trainer or coach.

Athletes training to get fit would ideally opt for a sports watch with a heart rate monitor that allows them to work out within their chosen heart rate zone; a calorie burn readout; a stopwatch; a lap timer to record the desired number of laps and store it in its memory; an interval timer (a timer set off to go off after specified intervals) and a count-down timer.

A speedometer is a handy tool for a serious runner or cyclist as it helps them to record how fast they ran/cycled after each training session

Heart rate monitors usually have a high heart rate alarm, current heart rate reading, an average heart rate measurement and a maximum heart rate count. Pedometers allows steps to be counted, the distance travelled to be calculated, the average speed and walking rate to be calculated more accurately and a step goal to be selected.

Long hours of training (when one would opt for a watch with a heart rate monitor etc) means lots of perspiration — and if the watch is not marked with an ISO water resistant rating (even the lowest rating), it means that it is not tested to withstand moisture. Sweat is not only made up of water but also contains salt, which means that it must be enclosed well enough that no fragile piece of the watch comes into contact with salt. There's no quicker way to damage an electrical watch than by exposing it to salt.

Certain sports watches can also wirelessly transmit workout data to a computer so that an athlete's training rates can be recorded, evaluated and measured against previous or later training rates.

#### **Latest developments**

Some watches make it so easy for the sportsmen to keep track of their exercise routine that they have done away with copious numbers of buttons along the watch face and instead opted for the touch-screen and audible feedback approach.

The Timex Ironman Sleek 150 has TapScreen technology that allows the athlete to access advanced features without breaking stride. The "Target Time" pacer gives audible performance feedback when lap times are logged (the watch has a lap memory of 150), when the runner is on pace or going too slow or too fast, thus allowing athletes to adjust their speed. Hydration and nutrition alarms remind the athlete to refuel at regular intervals.

The Timex Tap watch technology won the best watch category at the 2010 ISPO Awards. It is also a sponsor of the ING Direct pace teams at the New York City Marathon, a partner of the New York Road Running association and the Ironman Triathlon event series.

The Timex Ironman road trainer comes with its own digital heart rate monitor. Because the heart rate monitor interacts with the watch in a digital medium, "cross-talk" is eliminated. Cross-talk occurs when two athletes with heart rate monitors are in close proximity and a risk occurs that a watch will pick up the incorrect signal.

While Timex watches are geared towards the elite athlete and any sportsman serious about training, Wynn is a new active lifestyle brand for the sport and fashion market. They are less technical than the Timex watches but come in at a lower price, yet still offer plenty of technology. They are chronographic (have time-keeping and stopwatch functions), are water resistant, have alarms, backlight and dualtime functionalities that allow you to toggle between different time zones.

For more information about watches have a look at these websites:

- www.sportswristwatches.com
- www.extremewatches.co.uk
- · www.backpacker.com.

