



# SCUBAPRO



# ***DIGITAL HEART RATE MONITOR USER MANUAL***

## ***Introduction to SCUBAPRO digital heart rate monitor***

The SCUBAPRO digital heart rate monitor is a wireless heart rate and skin temperature transmitter that forms an integral part of the functionality of a variety of compatible SCUBAPRO dive computers. The heart rate monitor allows you to measure and display heart rate and skin temperature in real time during diving, swimming or exercising.


Water conducts heat approximately 20 times faster than air. Even with the best thermal isolation, body heat is lost through the large skin area and as a consequence the body regulates blood circulation in the skin and in the extremities to maintain the body's core temperature. Past recommendations to add more conservatism to cold-water dive profiles were based on the water temperature and/or a dive suit's thermal isolation estimation. Now, SCUBAPRO has taken diving to the next level and presents a new patented wireless technology for measuring the temperature and heart rate underneath the thermal isolation layer.

## ***How the SCUBAPRO digital heart rate monitor works***

Skin temperature is measured inside the SCUBAPRO digital heart rate monitor. The elastic strap is positioned at mid-torso which is the ideal location for estimating skin temperature independent of the type of dive suit being worn. The temperature is coded to the belt transmission signal and the dive computer shows and uses this information in SCUBAPRO's adaptive dive algorithm.

The heart rate monitor measures and displays the temperature on your dive computer in a range of +15°C to +38°C (59°F to 100°F) in 0.1°C increments. The heart rate is measured and displayed in a range of 30 to 210 beats per minute.

The SCUBAPRO digital heart rate and skin temperature monitor can be used while diving, swimming or exercising.

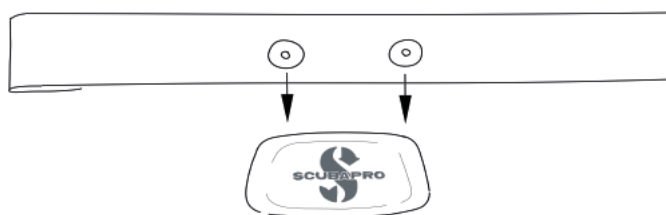
 **NOTE:** Heat vests with a heating element or other active heating suits that would overlay the heart rate monitor cannot be used with skin temperature heart rate monitors.

## ***How to pair the digital heart rate monitor with your SCUBAPRO dive computer***

The heart rate monitor must be paired with your SCUBAPRO dive computer before its first use. After this initial pairing the heart rate monitor will be on standby and ready to send data.

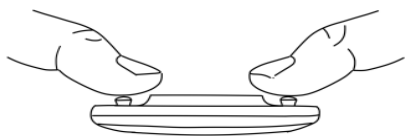
To establish the connection follow the steps below:

1. Remove the heart rate module from the elastic strap by unclipping it from the metal snap fastener.



2. Activate the pairing mode in your dive computer's pairing menu. Make sure your dive computer is in close proximity to the heart rate monitor when activating the pairing mode. For instructions on how to activate the pairing mode on your SCUBAPRO dive computer, please refer to your dive computer's user manual.

3. Place your thumbs on the two metal snap fasteners on the back of the transmitter module and check the indication displayed on your dive computer's screen.



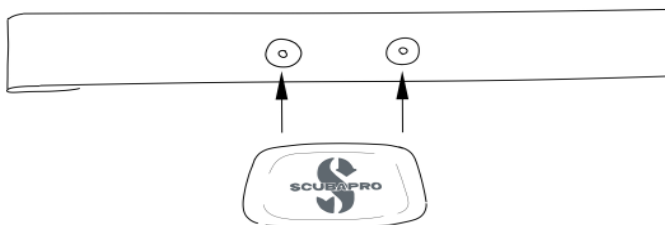
4. Your dive computer will let you know by displaying a message once the pairing with the digital heart rate belt has been successful.
5. In case the pairing was unsuccessful, exit your dive computer's pairing menu, wait at least 30 seconds, and repeat steps 2. and 3.

 **NOTE:** the heart rate monitor will not work properly for individuals who have excessive chest hair, as the hair blocks the direct contact of the electrodes to the skin.

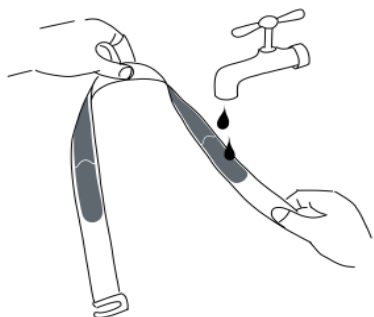
### **How to correctly wear the digital heart rate monitor**

For optimal wearing of the heart rate monitor follow the steps below:

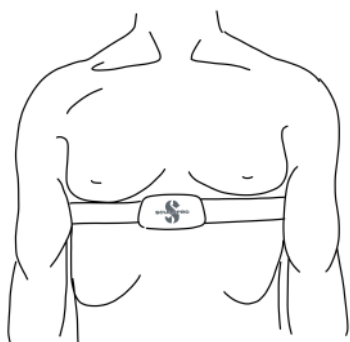
1. Clip the module onto the elastic belt.



2. If your skin is dry or when wearing a drysuit, the electrode area on the elastic strap, that is in direct contact with your skin, must be moistened.



3. Wear the heart rate monitor directly on your skin, just below your sternum. Adjust the strap so that it is comfortable to wear but snug enough to stay in place.



### **IMPORTANT**

**For optimal heart rate measurement and transmission, make sure that the module of the heart rate monitor is clipped onto the elastic belt with the SCUBAPRO logo on the front side of the heart rate monitor pointing right-side up.**


### ***Important notice to individuals with pacemakers, defibrillators or other implanted electronic devices***

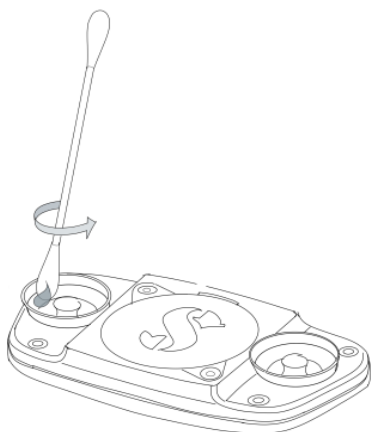
Individuals who have a pacemaker, defibrillators or other implanted electronic devices use the SCUBAPRO digital heart rate monitor at their own risk. Before use, we recommend a maximal exercise stress test under a doctor's supervision. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the SCUBAPRO digital heart rate monitor.


### ***How to take care of your digital heart rate monitor***

The SCUBAPRO digital heart rate monitor is a high-tech instrument that should be handled with care. Follow the caring instructions to ensure reliable measurement and to maximize the life span of the heart rate monitor.

**Module:** Detach the module from the elastic strap, rinse it in fresh water after every use, especially after contact with saltwater. Dry with a soft towel and store in a dry place.

 **NOTE:** For better isolation of the metal snap fasteners on the heart rate monitor's electronic module, we recommend that a thin layer of silicone grease be applied to the rubber sealing lips as shown in the illustration below. This step should be repeated more often when diving in saltwater.



 **NOTE:** Never pull on the rubber sealing lips! When detaching the electronic module from the elastic strap, take care not to pull on the rubber sealing lips around the metal snap fasteners!

**Strap:** Rinse the elastic strap in fresh water after every use and hang or lay flat to dry. Use a mild soap and water solution when needed. Do not soak, iron, dry clean or bleach the strap. Do not bend the electrode areas sharply.

The average expected performance of the elastic strap is around 12 months in normal use (1-2 usages weekly). Thereafter, its conductive qualities gradually deteriorate. We then recommend that the elastic strap be replaced. Replacement straps can be ordered from your authorized SCUBAPRO dealer. (PN 05.060.025)

**IMPORTANT:** Sweat and moisture may keep the electrode areas wet and the heart rate sensor activated. This could reduce the battery life. Dry and store the strap and the module separately to maximize the heart rate monitor's battery lifetime.

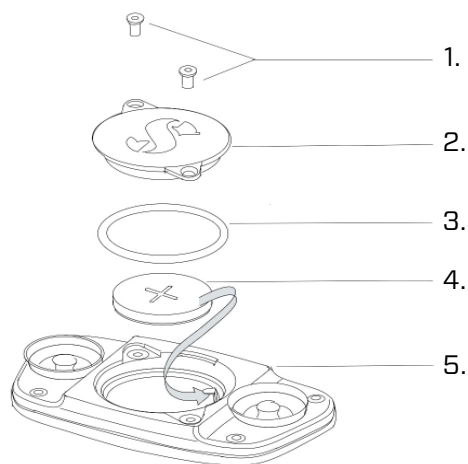
Keep the heart rate monitor in a cool and dry place. Do not store it wet in non-breathing material, such as a plastic bag, to prevent snap oxidation. Do not expose the heart rate monitor to direct sunlight for extended periods.

### ***How to replace the battery in your digital heart rate monitor***

The digital heart rate monitor is powered by a user-replaceable CR2032 type lithium battery. However, in order to avoid leakage by incorrect closure of the battery cap, we recommend having the battery replaced by an authorized SCUBAPRO dealer.


The following parts of the heart rate monitor are shown in the drawing below:

1. battery cap screws
2. battery cap
3. O-ring
4. CR2032 battery
5. heart rate monitor module



To change the battery in the heart rate monitor:

1. Dry the module of the heart rate monitor with a soft towel if wet
2. Open the battery cap by removing the screws
3. Replace the O-ring (replacement O-rings are available from your authorized SCUBAPRO dealer)
4. Remove the empty battery and recycle it in an environmentally friendly way
5. Insert the new battery. Note the polarity, “+” is marked on the body. Do not touch poles or contacts with bare fingers
6. Close the battery cap
7. Check the heart rate monitor function on your dive computer

<b>⚠ WARNING</b>	
<ul style="list-style-type: none"> <li><b>INGESTION HAZARD:</b> This product contains a button cell or coin battery.</li> <li><b>DEATH</b> or serious injury can occur if ingested.</li> <li>A swallowed button cell or coin battery can cause <b>Internal Chemical Burns</b> in as little as 2 hours.</li> <li><b>KEEP</b> new and used batteries <b>OUT OF REACH of CHILDREN</b></li> <li><b>Seek immediate medical attention</b> if a battery is suspected to be swallowed or inserted inside any part of the body.</li> </ul>	

### **⚠ WARNING**

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.**
- Even used batteries may cause severe injury or death.**
- Non-rechargeable batteries are not to be recharged.**
- Do not force discharge, recharge, disassemble, heat above 50°C or 122°F or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.**

### **⚠ WARNING**

- Ensure the batteries are installed correctly according to polarity (+ and -)**
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.**
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.**

### **Technical specifications**

Maximum operating depth: 120m / 393ft

Weight: 49g / 1.72 oz

Battery type: user-replaceable CR2032

Battery life: approximately 100 hours (operating) or 1 year (in sleep mode)

Operating temperature: -10°C to +50°C / 14°F to 122°F

Measuring temperature range: +15°C to +38°C / 59°F to 100°F

Transmission range: 1.0m/3ft

Heart rate measuring & transmitting range: 30 to 210 bpm

## **Warranty**

The Digital Heart Rate Monitor has a 2-year warranty covering defects in workmanship and functioning. The warranty only covers dive gear which have been bought from an authorized SCUBAPRO dealer. Repairs or replacements during the warranty period do not extend beyond the warranty period itself. Excluded from warranty coverage are faults or defects due to:

1. Excessive wear and tear.
2. Exterior influences, e.g. transport damage, damage due to bumping and hitting, influences of weather or other natural phenomena.
3. Servicing, repairs or the opening of the dive equipment by anybody not authorized to do so by the manufacturer.
4. Pressure tests which do not take place in water.
5. Diving accidents.
6. Opening the housing of the digital heart rate monitor.
7. Commercial use.
8. Exposing the unit to chemicals which include but are not limited to mosquito repellents and sunscreen.
9. Repairing with unauthorized spare parts.
10. Using any software or accessory which is not supplied by the manufacturer.

For European Union markets, the warranty of this product is governed by European legislation in force in each EU member state.

All warranty claims must be returned with dated proof-of-purchase to an authorized SCUBAPRO dealer. Visit [www.scubapro.com](http://www.scubapro.com) to locate your nearest dealer.

**User's responsibility**  
This instrument is intended for recreational use only. The digital heart rate monitor must not be used as a substitute for obtaining measurements that require professional precision or laboratory-quality measurements.

## **CE compliance**

The CE marking is used to mark the conformity with the European Union Directive 2014/30/EU (Electromagnetic Compatibility) and 2014/53/EU (Radio Equipment Directive).

## **FCC compliance**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Repairs should be made by authorized SCUBAPRO service personnel. Unauthorized repairs will void warranty.

**FCC WARNING:** Changes or modifications not expressly approved by SCUBAPRO could void your authority to operate this device under FCC regulations.

## **Manufacturer**

UWATEC AG  
Bodenackerstrasse 3  
CH-8957 Spreitenbach  
SWITZERLAND



### **Disposal of the device**

Your dive instrument is manufactured with high-quality components that can be recycled and reused. Nevertheless these components, if not properly managed in accordance with the regulations on waste electrical and electronic equipment, are likely to cause harm to the environment and/or to human health. Customers living in the European Union can contribute to protecting the environment and health by returning old products to an appropriate collection point in their neighborhood in accordance with EU Directive 2012/19/EU. Collection points are in particular provided by some distributors of the products and local authorities. Products marked with the recycling symbol on the left must not be disposed of in normal household waste.

