



RESSENCE

BEYOND HANDS

TYPE 5

USER MANUAL

« Built on the expertise of yesterday, crafted with today's technology, your TYPE 5 is designed for tomorrow. »

A handwritten signature in white ink, reading "Benoît". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the word.

Benoît Mintiens
Founder and Creative Mind



PHILOSOPHY

RESSENCE watches are designed from the outside to the inside. Although strikingly innovative, the technologies implemented are relegated behind the scenes. What is more important is the user experience on looking at a watch that seems to project the temporal indications onto the glass. Our mono-surface dial is composed of discs and rings adjusted to the micron. Exit the physical hands. They are replaced by graphical lines in order to reproduce the angles through which we are accustomed to reading the time. All RESSENCE watches share the same inimitable DNA. The main dial, as well as the auxiliary dials, revolve continuously, behaving like moons around a planet. This means that the face of the watch changes continuously - which is the essence of Time.



DESIGNED IN BELGIUM MADE IN SWITZERLAND

We design and engineer our watches in Antwerp, Belgium. The first thing we ask is what do people need? Functionality is key. Next we start questioning the user experience. We aim to awaken senses and provoke wonder. Then we begin manufacturing around our ideas. We innovate, we create. It requires time and commitment. We produce and assemble our watches in Fleurier, Switzerland.

USER EXPERIENCE

At RESSENCE, we go beyond providing useful functions on a watch. Our watches are a joy to own but most importantly to use, to feel, to touch. It is physical, almost magical yet always relevant.

RESSENCE's experience is beyond hands.





INNOVATIONS

DISCS

It was in 2010 on the ZERO SERIES prototypes that we unveiled for the first time the patented invention on which rests our new expression of Time: ROCS which stands for Ressence Orbital Convex System. Fully designed and developed in-house, this unique horological complication module is composed of co-planar discs and rings of different sizes, curved to match the bend of the glass that covers them. Recto, the discs create a flush dial. Verso, they serve as platina and bridges to the module with a large number of components - from 107 components for the TYPE 1 [ROCS 1] up to 215 components for the TYPE 5 [ROCS 3] which drives a six-fold display complication. Each of the time indications

of the RESSENCE watches is generated by the ROCS from a single piece of information provided by the automatic base movement: the minute.

With the ROCS, time-information is displayed on a single surface, both eyes see a same image (like words on a sheet of paper), while on a traditional watch, where the hands and dial are superposed, the projected image is different for each of the two eyes because of its 3D nature. The choice to focus on the minute disc is also dictated by a concern for legibility. In most cases, this is the information you first look for when checking your watch. Every minute that passes, you observe a different dial.

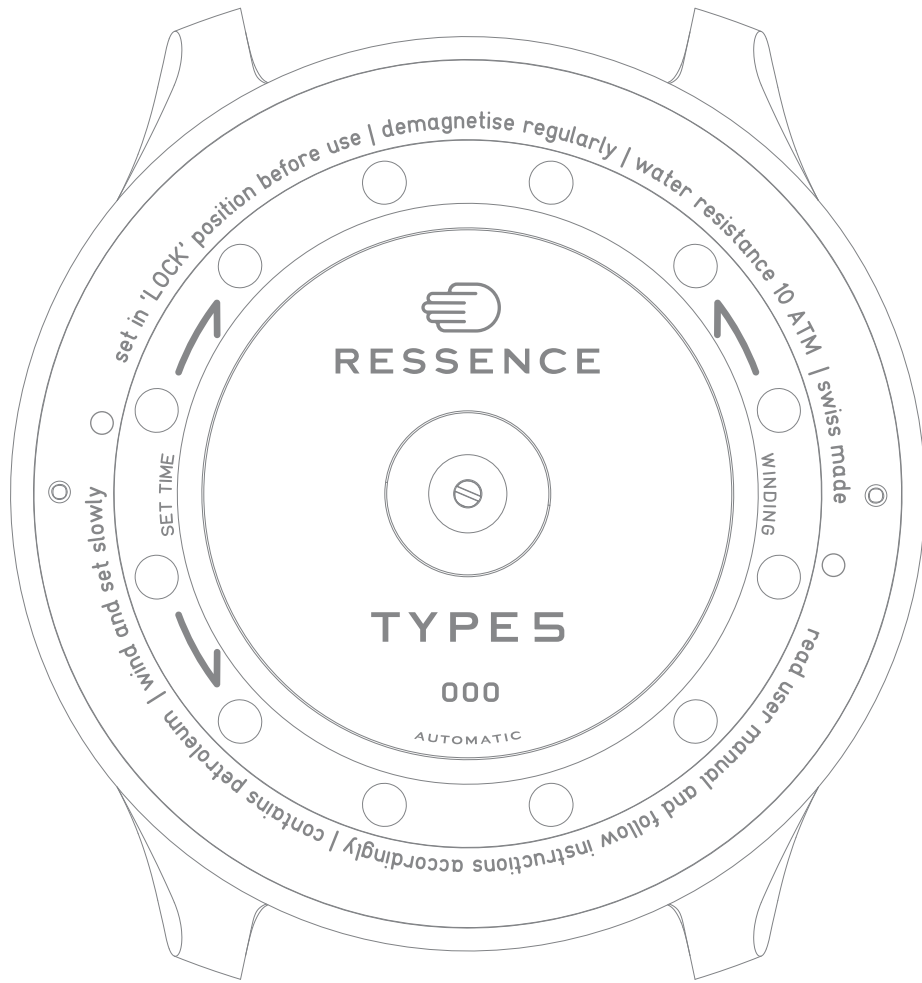




INNOVATIONS

NO CROWN

In the pursuit of improved ergonomics, the organic design of the RESSENCE watches becomes imperative in obtaining a completely sleek surface. The case is virtually invisible and the crown has disappeared from the scene. Right and left-handers are now equally well-served. On TYPE 5 the crown is replaced by an alternative of ingenious simplicity, namely, the rotating sapphire back of the watch, which assumes the functions of manual winding and time setting. Behind the easy setting / winding mechanism system also lies the logical principle that the watch only needs to be set when it has stopped. Simply setting the watch winds it at the same time.





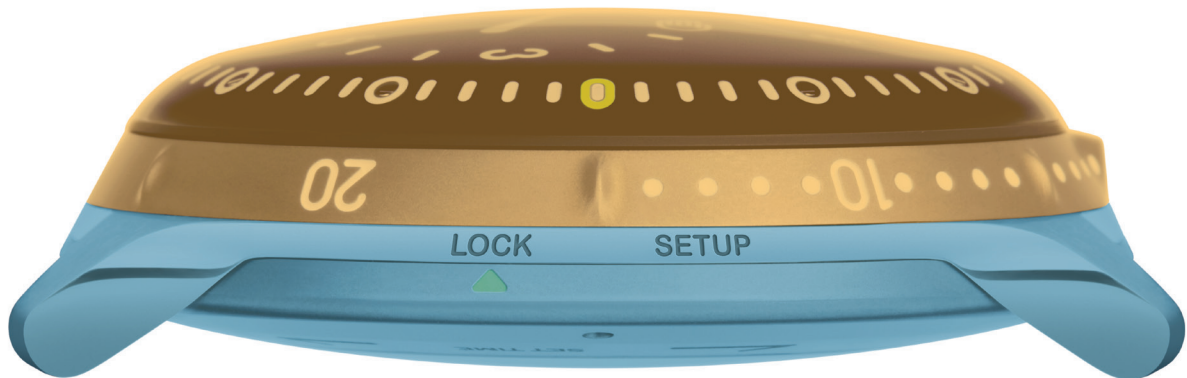
INNOVATIONS

OIL-FILLED

For the first time in the history of watchmaking, RESSENCE introduces a liquid inside a mechanical watch. On TYPE 5, the entire upper part containing the ROCS is immersed in 37.5 ml of oil. Invisible to the eye, the fluid eliminates the refraction between the glass and the dial. The 142 components of the ROCS are permanently lubricated and are relatively lighter since, according to Archimedes' Principle, they are suspended in liquid. The use of oil improves chronometry in addition to readability.

The presence of the oil under the glass of the watch creates a never before seen “drop of water” effect. Regardless of the angle at which the dial is viewed, its readability is optimal, even underwater (this is a world premiere for a mechanical watch). On the TYPE 5 the oil also guarantees protection against overpressure equivalent to that of a tool watch without the need to reinforce the case and use a thicker glass.

OIL



AIR



INNOVATIONS

BELLOW SYSTEM

The volume of oil in the upper part of TYPE 5 varies depending on the ambient temperature. We have developed a self-compensation system operating in the range of -5 to +55 degrees Celsius [23°F to 131°F]. While the Swiss watchmaking standard requires a watch to be able to withstand a range of +10 to +40 degrees Celsius [50°F to 104°F]. The system consists of a series of 7 small bellows which retreat when the oil expands under the effect of heat, or compensate the contraction of the oil under the effect of cooling.

The oil volume self-compensation system prevents the formation of an air bubble on the surface of the dial. It is indirectly connected to the temperature gauge of the oil present on the dial. The latter can therefore be seen as a graphical and mechanical representation of the position of the bellows. It should be noted that temperature variations do not affect the correct operation of the watch.





INNOVATIONS

MAGNETIC TRANSMISSION

To maintain the oil-filled upper part of the watch leak free, the horological complication module, ROCS, is hermetically separated from the automatic base calibre by a Grade 5 Titanium membrane. Since the physical connection between the two is no longer possible, we have developed an ingenious device based on magnetism, with micro magnets placed on either side of the membrane.

In addition to this system we have set up a series of extra protections of the regulating organ against the effects of magnetism (using magnetic conductors and shielding). The guarantee of optimal chronometry under all circumstances. (tested in laboratories, the residual magnetic fields are practically equal to earth magnetism)



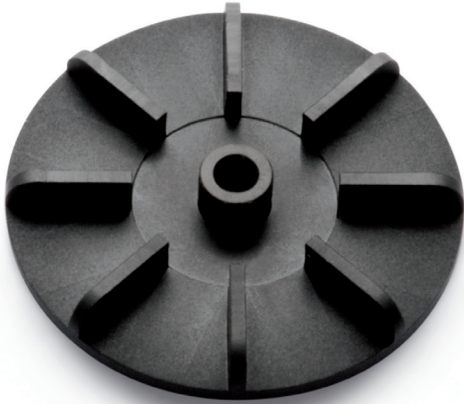


INNOVATIONS

SHOCK ABSORBER

The magnetic transmission from the base movement to the ROCS ensures that in the event of a significant lateral shock, the micro magnets located on either side of the membrane can momentarily decouple. To compensate for this phenomenon, on TYPE 5, we have introduced a hydraulic shock absorber. It is a small disk that is an integral part of the ROCS 5 the underside of which has blades. Equipped with a gear ratio 1/40, it starts to turn very quickly in the event of a shock and acts like a turbine. The oil is sucked in and can only escape by the microscopic space left between the discs. The whole ROCS is then slowed, which prevents it from being disconnected from the base movement. The shock absorber is manifested visually by the rapid rotation of the runner disc integrated in the dial.

Without any real consequence in normal use, a brief decoupling of the mechanism is not conceivable on a diving watch for the obvious safety reason of the need to indicate to the wearer the precise duration of the time spent under water.



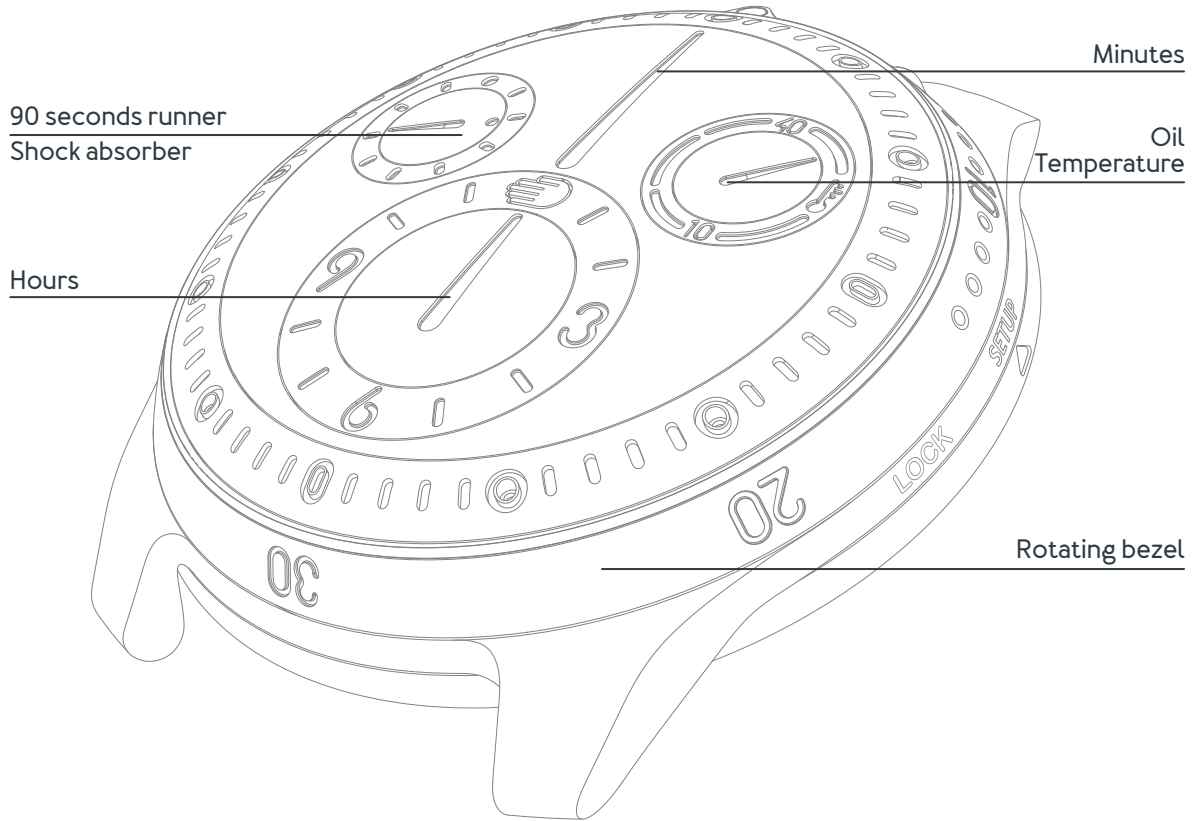


TECHNICAL FEATURES

FUNCTIONS	<ul style="list-style-type: none">· Runner (90 Seconds), Minutes, Hours, Oil Temperature, Rotating Bezel
MOVEMENT	<ul style="list-style-type: none">· ROCS 5 module driven by the minute axle of a customised 2824/2 base calibre· 3 dimensional bridge architecture· Self-winding· 36 hours power reserve· 28,800 vibrations per hour· 25 gears· 41 jewels· 3 ball bearings (2 ruby & 1 ceramic)
DIAL	<ul style="list-style-type: none">· Convex (125 mm radius) grade 5 Titanium discs with 3 eccentric biaxial satellites inclined at 3° (hours) and 4,75° (runner and oil temperature)
CASE	<ul style="list-style-type: none">· 46mm diameter x 15,5mm thickness· Grade 5 Titanium· Sapphire crystal top and bottom with anti-reflection coating inside and outside· Manual winding over 45° and set up via caseback· Rotating two directions
STRAP & BUCKLE	<ul style="list-style-type: none">· 24mm/22mm· Ardillon buckle
WATER-RESISTANCE	<ul style="list-style-type: none">· 10 ATM
TOTAL COMPONENTS	<ul style="list-style-type: none">· 324



HOW TO READ TIME





SETTING YOUR WATCH

The TYPE 5 has a unique setting mechanism. Unlike traditional watches, the TYPE 5 has no crown for winding or setting the watch. The different actions normally carried out with a crown are done by turning the caseback of the watch clockwise and/or counter-clockwise. To ensure maximum water-resistance it has a specific system, the RCLS (Ressence Compression Lock System), for locking and compressing the gasket. Important notice is to always turn slowly when winding or setting. We recommend to first unlock the caseback, then manually wind the watch if necessary, set the time and finally lock the caseback.

1. UNLOCKING

The external ring beneath the caseback can be turned in two positions: LOCK or SETUP. Set the external ring in SETUP position by turning the ring clockwise (when looking at the caseback). The coloured triangle indicates its position.

2. MANUAL WINDING

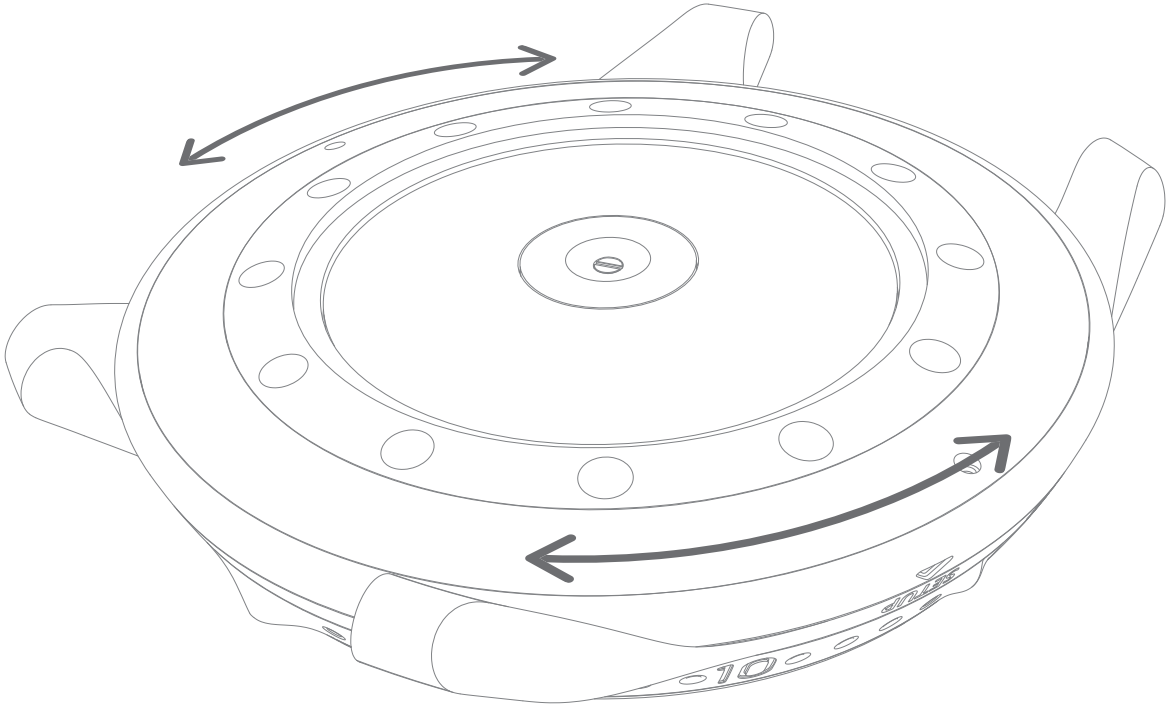
Turning the sapphire caseback counter clockwise (when looking at the caseback) will wind the watch manually over a short section (corresponding to 45° out of 360°). The winding section starts when it becomes harder to turn. A winding sound is perceptible when you are over the winding section followed by a “click” sound when you are leaving it. While manually winding, the time will change accordingly. It is therefore recommended to wind by oscillating back and forth the sapphire caseback over the winding section about twenty times. (like a disc jockey would)

3. TIME SETTING

The hour indication is directly connected to the minute indication. This means you will need to turn the sapphire caseback one time to add one hour. It is recommended to set the time by turning the sapphire caseback counter clockwise (when looking at the caseback).

4. LOCKING

Set the external ring in LOCK position to lock the caseback by turning the ring counter clockwise (when looking at the caseback). The coloured triangle indicates its position.





F A Q

IS MY TYPE 5 WATER RESISTANT?

Your TYPE 5 is protected against any water intrusion up to 10 atmospheres. An air test checks the water-tightness of the gaskets, the seals and the bonding of sapphire crystals. The external ring should always be positioned on LOCK to guarantee the water resistance. Your TYPE 5 must be rinsed after every use in salt water.

IS MY TYPE 5 TEMPERATURE RESISTANT?

The temperature gauge present on the dial of your TYPE 5 indicates your internal watch temperature.

Blue zone: -5 to +10 degrees Celsius (23°F to 50°F)

White zone: +10 to +40 degrees Celsius (50°F to 104°F)

Red zone: +40 to +55 degrees Celsius (104°F to 131°F)

The normal internal temperature of a watch with skin contact is around 25 degrees Celsius (77°F). The Swiss watchmaking standard therefore requires a watch to be able to withstand a range of +10 to +40 degrees Celsius (50°F to 104°F). This range corresponds to the white zone of the temperature gauge present on the dial.

Your TYPE 3 has a specific self-compensation bellow system operating in the range of -5 to +55 degrees Celsius (23°F to 131°F). This covers all extreme temperatures your watch might undergo while wearing it. It should be noted that those temperature variations do not affect the correct operation of your watch. However, we recommend to remain in the green and yellow zone as much as possible.



F A Q

IS MY TYPE 5 SHOCK RESISTANT?

In your TYPE 5 the ROCS module is physically separated from the base calibre because it is suspended in oil. Several micro magnets, connected to each other, are positioned inside the upper half (ROCS module) and the lower half (base calibre). That way the minute information can be transmitted from the base calibre to the ROCS even if the magnets are separated by a titanium grade 5 membrane. TYPE 5 has a hydraulic shock absorber that prevents the magnets from being disconnected.

IS MY TYPE 5 PROTECTED AGAINST MAGNETISM?

Your TYPE 5 is protected from internal as well as external magnetism. We use extra small magnets measuring only 1 mm diameter and 0.5 mm thick. They are physically positioned far from the regulating organ. We developed extra strong magnetic conductors to reduce the spread of magnetic fields. They concentrate the fields in loops around the magnets.

The residual fields are deflected by a specially designed alloy protecting the regulating organ in the same way that a Faraday cage would do for electro-magnetic fields.

HOW CAN I CHANGE THE STRAP OF MY TYPE 5?

We use the standard system of push pins for the straps.

WHEN DO I NEED TO SERVICE MY TYPE 5?

Your TYPE 5 does not require more frequent servicing than a traditional watch. It is advisable to carry out a full service at an authorized Ressence Service Center once every three to five years. We recommend that you have the water resistance checked once a year. Please note the service frequency also depends on the climate and your own individual care of the watch.



IMPORTANT NOTICE

RESSENCE bvba declines all responsibility and cannot be liable for any consequence related to an oil leak whatever the cause. The consequences related to the exposure to temperatures outside the recommended range cannot be considered as manufacturing defects. The oil used in TYPE 5 is a Petroleum-based or Silicon based lubricant (highly flammable). Do not swallow or inhale vapours.

In the event of skin contact, wash the skin with soap and rinse with water. In the event of eye contact, rinse abundantly with water and consult a specialist.



WARRANTY

We go to great lengths to ensure that our watches are both genuine and enjoy many years of good service. Each watch comes with an individual identification serial number, which can be checked against our records to prove its authenticity. Even our warranty cards are protected against tampering - made by Prooftag, each card displays a randomly generated pattern of bubbles that is unique in positioning, shape and size. The card cannot be replicated - not even by Prooftag.

The card - once completed, dated, signed and stamped by the authorised RESSENCE retailer who sold the watch - makes the warranty valid. This guarantees our watches against all manufacturing defects for two years from the date of purchase. To make a claim against this warranty, please simply present your watch and completed warranty card to any authorised RESSENCE retailer.

Any card stamped by a non authorised RESSENCE retailer is invalid.

The warranty does not cover damage caused by inappropriate use or handling of the watch. It excludes wear and tear, damage caused by accident or careless handling accordingly to the warranty terms.

One last thing: in the unlikely event that your RESSENCE watch needs repairing, or when the time comes to duly maintain it, all work must be conducted by an authorised Ressence Service Center. Unfortunately, failure to observe the above conditions invalidates the warranty.



MAINTENANCE

A RESSENCE watch comprises many dozens of tiny, often delicate parts, carefully combined to make a robust, high precision timepiece. Each example is assembled with the utmost care - but some things are beyond our control. Shocks, magnetic fields and even gravity can, over time, affect the performance of its regulating parts - those that work to count out the passing of time, normally with such accuracy. This is true of any mechanical watch.

As such, we recommend that it undergoes a complete overhaul every three to five years, depending on how tough a life it has led. This will ensure that your RESSENCE watch enjoys a long, trouble-free life as an exemplar of precision time-keeping and high grade mechanics, and will preserve its value.

This overhaul should only be conducted at an authorised Ressence Service Center. This will be best placed to appreciate and restore the particular intricacies of a RESSENCE watch.

We also advise that each year your RESSENCE watch undergoes a water-resistance test. This will ensure that the gaskets that protect your watch from humidity and dust remain at maximum efficiency.

The service centre can also de-magnetise your watch, which will help re-establish the normal rate of operation and accuracy. It is just a fact of modern life that, thanks to our use of electronic devices, TVs and, occasionally, x-ray machines, the environment is replete with sources of strong magnetism. These can affect the running of a mechanical watch.



All RESSENCE watches undergo rigorous quality control in compliance with the highest standards of the Swiss watchmaking industry. After being pre-tested in Switzerland, the entire watch cased-up is controlled internally over a period of 500 hours. The R500H - RESSENCE 500 Hours - takes place in our headquarters and consists of the 6 following operations.

- Rating Regularity Control
- Water Resistance
- Power-Reserve Control
- Shock Resistance
- Temperature Resistance
- Aesthetics Control

OUR AWARDS



SPIRAL
AWARDS
年度好表 游絲十大
2014



OUR MILESTONES

Benoît Mintiens introduces three functional **PROTOTYPES** at Baselworld. Our new concept receives ecstatic reviews.

2010

2011

The **ZERO SERIES**, a limited run of 50 pieces, is launched to meet the demand of connoisseurs around the globe. It sells out.

We introduce the **SERIES ONE**, a 150 piece edition based on the ZERO SERIES.

2012

2013

The **TYPE 5**, the first ever oil-filled mechanical watch takes the watch industry by surprise. It is applauded as one of the most innovative watches of the year.

We release the **TYPE 1**, our most stripped back watch to date.

2014

2015

TYPE 5, the first mechanical diver watch to be perfectly readable underwater regardless of the viewing angle, is launched.

The Cultural Council of the FHH certifies that RESSENCE meets **HAUTE HORLOGERIE** standards of excellence, the techniques of watchmaking in symbiosis with the applied arts.

2016

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