# F.P.JOURNE Invenit et Fecit

User manual / Octa Sport - Ref. ARS2

A unique design based on an exclusive mechanism



Calibre Octa
A Horological Ideal\_

The construction of the Octa calibre has less powerful ties with the history of horology than the constant-force device or resonance models do. Nevertheless, it symbolizes a horological ideal: giving timekeepers the highest possible degree of precision and autonomy.

It can be observed, that if church clocks were set so high in towers, apart from enhancing visibility, was mostly because it often took an entire month for the driving weights to drop the length of their cords. Numerous systems were invented to increase the running time of timekeeper's devices, only meeting limited success. Given the restricted volume of a wristwatch, the size of the mainspring was immediately limited. Watchmakers then discovered the trick of adding an extra wheel to the customary gear train, in order to extend the length of its development. Unfortunately, using this system only led them to observe that the level of energy actually reaching the balance remained poor. To compensate, they fitted a smaller balance consuming less energy, but which also lost in stability. Therefore, it's not unusual to find watches that run for several days displaying an extremely unpredictable level of accuracy.

This challenge was a powerful source of motivation. I then imagined that the best and most obvious solution to lengthen the running time would be to increase the capacity of the spring development. Given its stability (1 metre and 1 millimetre thick), the challenge was to integrate it on the same level as the gear train and escapement. Thanks to the low torque of this spring, I could achieve extremely fast automatic winding (one and a half hour on a Chappuis cyclotest for over 5 day's running).

Once the challenge of autonomy was thus successfully met with this automatic winding calibre, I knuckled down to the second challenge of managing to insert various complications into that same movement: power reserve with large date display, fly-back chronograph with large date display, retrograde annual calendar, UTC, etc... and doing so while maintaining an identical size for all models in the Octa collection.

Three years of research and development were required before this one of a kind automatic calibre could be presented to the public.

François-Paul Journe

# Octa Sport

Mechanical watch with automatic winding entirely in Titanium\_

F.P. Journe strengthens its "lineSport" with the new Octa model with automatic winding, with movement in Aluminium.

An exclusive new watch of an astounding lightness, thought and conceived specifically for sportive activity.

This collection has been inspired by an important collector, aficionado of F.P. Journe watches, who committed himself in numerous marathon and triathlon competitions and wished to have an ultra light sports watch, coupled with a movement of authentic high horology.

F.P. Journe undertook long researches to find an ultra light and resistant material to receive his exceptional calibres; while maintaining the standards of high horology that inhabit his everyday life. With an extreme lightness in absolute comfort, the watch in its totality only weighs around 75 grams.

The passage from 18K rose gold, used for all the F.P. Journe movements, to aluminium was not without difficulty, for obvious technical reasons. F.P. Journe took his research to a higher level in an aesthetical quest to complete the appropriate contrast in colours.

Rubber inserts are fixed with an outstanding process to the tips of each link of the aluminium bracelet, the sides of the case and the titanium crown in order to efficiently protect the watch from any shocks, just like the bumper of an ancient automobile. The crown and the folding clasp, both in Titanium and engraved with the F.P. Journe signature, are covered with a rubber coating. In addition, the folding clasp offers an adjustment system of a half link size (4mm approx.).

Octa Calibre
Optimized winding system

Always taking into account the notes and observations concerning his watches, François-Paul Journe states: "I realized that one of my friend's Octa was never completely wound because he works on a computer and his hand doesn't move enough."

From this observation he creates the new Octa calibre (1300-3) that uses the slightest movement to automatically wind the watch. With talent, the watchmaker turns the problem around, and creates a new off centered heavier rotor, that winds in one direction only with a self-locking ball bearing system. The ceramic balls allow the rotor to move in one direction and block it in the other. This way, every infinitesimal movement is maximally exploited for an optimized winding of the watch.

The new calibre retains the characteristics of the classic Octa with: a five day power reserve (120h) and a variable inertia balance wheel for an optimum yield that offers each model of the Octa line an irreproachable stability.

The new "lineSport" is composed of a collection of ultra light watches entirely made in Titanium and Aluminium: specifically conceived for a proficient sportive activity. The Aluminium movement of each watch of the "lineSport" retains the exceptional properties of the exclusive F.P. Journe calibres.

### Crown

# Manual winding:

Your watch is automatically wound when worn.

If the watch is stopped, turn the crown in position **0** about a dozen times anti clockwise.

All models of the Octa Line offer an exceptional power reserve of 5 days (+120 hours).

The Octa models can operate above those 120 hours but the precision is thus not as efficient.

## Setting the date:

Pull the crown in position 1 and turn anti clock wise.

A manual correction is necessary, except for the months of 31 days.

## Setting the time:

Pull the crown in position 2 and turn anti clock wise to move the watch hands forward.

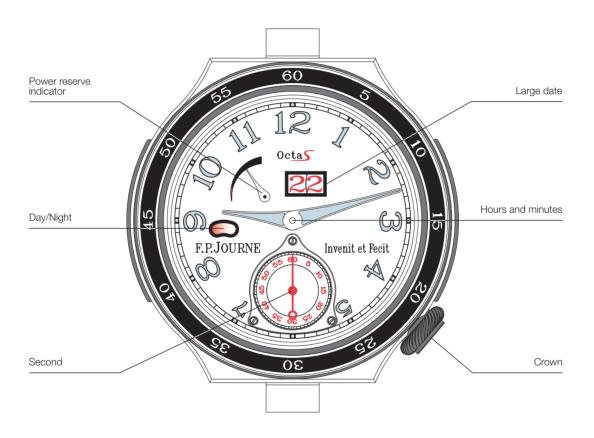
It is strongly advised not to turn the hands in the other direction.

#### Power reserve:

The power reserve hand indicates the number of hours remaining for the functioning of the watch.

# Important!

Push the crown back in position **0** for the watch to work.



The sapphire second dial is fixed by a Titanium circle, screwed\* on the Aluminium dial.

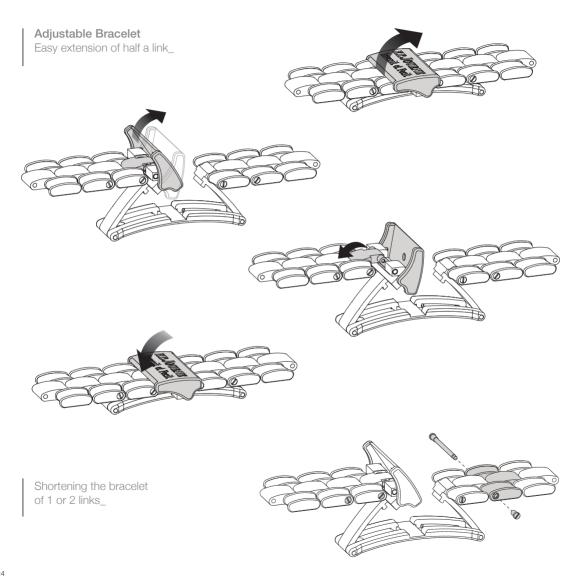
<sup>\*</sup>Registered System

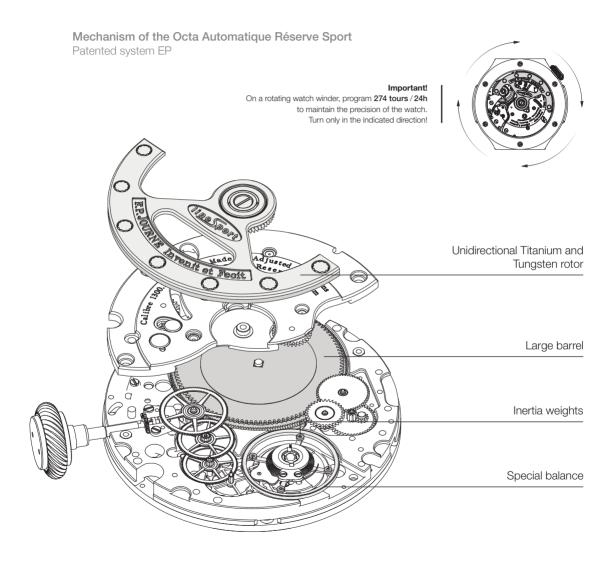
Titanium

Ceramic









| Movement_                   | Calibre 1300.3 Unidirectional automatic winding Movement in aluminium alloy |                      |  |
|-----------------------------|---|----------------------|--|
| Dimensions of the movement_ | Overall diameter: Casing-up diameter:                                       | 34.60 mm<br>30.40 mm |  |
|                             | Overall height:   | 6.15 mm              |  |
|                             | Height of winding stem:   | 3.10 mm              |  |
|                             | Diameter of stem thread:  | S 1.20 mm            |  |
| Balance_                    | Four adjustable inertia weights   |                      |  |
|                             | Anachron free-sprung flat balance spring                                    |                      |  |
|                             | Mobile stud holder  |                      |  |
|                             | Free Sprung   |                      |  |
|                             | Nivatronic laser soldered balance spring                                    |                      |  |
|                             | Pinned GE stud  | 04 000 (1- (011)     |  |
|                             | Frequency: Inertia:   | 21,600 v/h, (3Hz)    |  |
|                             | Angle of lift:  | 10.10 mg*cm²<br>52°  |  |
|                             | Amplitude:  | 12h dial up: > 280°  |  |
|                             | / William Co.   | 90h dial up: > 220°  |  |
| Main characteristics_       | Three position crown:   |                      |  |
|                             | Winding of the watch in position <b>0</b> , clock wise                      |                      |  |
|                             | Correction of date in position 1, anti clockwise                            |                      |  |
|                             | Correction of time in position 2  |                      |  |
|                             | Instant jump calendar   |                      |  |
|                             | Off centre winding rotor in Titanium with Tungsten segment                  |                      |  |

Barrel with slipping spring Escapement 15 tooth

| Indications      | Countried house and union to a                          |          |
|------------------|---|----------|
| Indications_     | Centred hours and minutes Small second at 6h00          |          |
|                  | Large date  |          |
|                  | Power reserve at 10h30                                  |          |
|                  | Day/Night indication                                    |          |
|                  |   |          |
| Autonomy_        | $160 \pm 10 \text{ h}.$                                 |          |
|                  | Winding Speed on watch winder: 274 rotations / 24 hours |          |
| Decoration_      | Circular Côtes de Genève on bridges                     |          |
|                  | Partly circular graining on baseplate                   |          |
|                  | Polished screw heads with chamfered slots               |          |
|                  | Chamfered and circular grained wheels                   |          |
|                  | Steel components hand polished and chamfered            |          |
| Case_            | Titanium with rubber inserts                            |          |
|                  | Diameter:   | 44 mm    |
|                  | Total height:   | 11.00 mm |
| Dial_            | Aluminium alloy and sapphire                            |          |
|                  | Superluminova hands                                     |          |
|                  | Superluminova appliqué numerals                         |          |
|                  | 12 luminescent points                                   |          |
| Number of parts_ | Movement without dial:                                  | 286      |
|                  | Jewels  | 37       |
| Weight_          | Total weight on Titanium bracelet:                      | 75 g     |
|                  | Movement alone:   | 11 g     |
|                  | 1 sapphire glass sub dials:                             | 2 g      |
|                  |   |          |
|                  |   |          |
|                  |   |          |

## Maintenance

Your wristwatch should be serviced once every four years to maintain its precision.

# Important

Keep the original warranty card supplied with your wristwatch carefully. Your authorized **F.P.JOURNE** retailer will need this identity card for any after sales servicing. For all maintenance or repair, your wristwatch must be entrusted only to an appointed **F.P.JOURNE** agent.

## Warranty

Your **F.P.Journe - Invenit et Fecit** watch is covered by a warranty against any manufacturing flaws for a period of **2 years** as of the date of purchase appearing on the back of the warranty card or certificate. The warranty is valid only on presentation of the original card or certificate, duly filled out by the authorised retailer (serial number, date of purchase, retailer's stamp). The warranty does not cover normal wear or damage resulting from abnormal use of the watch, accidents or alterations.

# Warranty extension\_

If your **F.P.Journe - Invenit et Fecit** watch was purchased at an **F.P.Journe Boutique**, your watch is automatically covered for a period of **3 years** as of the date of purchase appearing on the back of the warranty card or certificate. If your watch was purchased at an **authorized retailer**, we kindly invite you to register on **https://customerservice.fpjourne.com/en/guarantee** during the 30 days following the initial date of purchase to benefit from **an additional year of warranty**.