

RÉPÉTITION SOUVERAINE

An ultra flat and extremely light Minute Repeater



François-Paul Journe is continually searching to invent and craft timepieces which are both innovative and practical. His incomparable style ne has sometime been copied, but his highly inventive technique is far more difficult to duplicate. After completing his majestic Grande Sonnerie, a watch rating 10/10 on the scale of complications, François-Paul Journe decided to follow up with yet another incredibly complex timepiece, the first ultra-slim minute repeater wristwatch.

After the Grande Sonnerie, the minute repeater is the most complex and sophisticated of horological complication, one that demands the very utmost in both technical and artistic virtuosity.

To date, the oldest known watch with *répétition minutes* was produced around 1710 in Friedberg, Germany. This invention made it possible to tell the time during the night by activating a pusher on the case. When activated by the pusher, the complication "tells" the time by causing two hammers to strike gongs which sound the hours, the quarters and the minutes.

With this new ultra-slim minute repeater, François-Paul Journe once again raises the bar for striking watches. The key goal for the creation of the Repetition Souveraine was to create a minute repeater that would leave an imprint in the history of horological science.

He has re-invented the minute repeater mechanism in a way which enables strong crystal clear tones to emanate from a seemingly impossibly svelte movement of barely 4.50mm, more reminiscent of a simple hand wind calibre than a highly intricate and complex complication. By looking at it, one would never guess the complicated mechanism hidden behind it. The simple aspect of its silver guilloché dial, identical to that of the Chronomètre Souverain, hardly let foresee the discrete window placed between 9 and 10 o'clock. It features the hammers striking the gongs at the hour, the quarters and the minutes, which can be activated by pressing a delicate indented slide on the left side of the case. This redevelopment has merited the application of two patents.

Its ultra flat movement in 18K Gold with its case in steel provide an astonishing lightness to the watch for a weight of only 69.6 grams, strap included. It makes the Répétition Souveraine one of the weightless complications in the world.

Unique patented Repetition Souveraine mechanism

Two key technical developments have enabled François-Paul Journe to construct a sweet sounding ultra-slim repeater movement. The first is the flat gong, first seen on the F.P.Journe Grande Sonnerie, which produces a louder and clearer sound than traditional gongs. And because the gong is mounted under the dial, instead of around the movement, it allows more room for the movement.

The second is an innovative system of striking racks and strike selection mechanisms which take up much less space than conventional strike mechanisms.

Unlike traditional minute repeaters, the hours and minutes of the Répétition Souveraine do share the same hammer; a pause is thus automatically inserted between the hour and minute chimes when there are no quarters. The quarters sound with classic double chimes. An inertia regulator controls the speed of the chimes, thus eliminating the background noise usually associated with traditional air regulators.

Case

There is one metal that resonates sound above all others and that metal is Steel. In his typical no-compromise style, François-Paul Journe places performance and function above all. It is only natural that, as with the Sonnerie Souveraine, the dulcet tones of the Répétition Souveraine reverberate from a stainless Steel case.

Movement

The manually wound movement, with base-plates and bridges in 18K rose Gold, oscillates at 21,600v/h. Twin barrels work in parallel to deliver stable power for most of their 56-hour indicated reserve. The F.P. Journe free-sprung balance, with variable inertia adjustment on four opposing weights, is dynamically adjusted in six positions.

Many more components in very little extra space

While the Répétition Souveraine calibre shares its technical heritage with the Chronomètre Souverain, the sheer complexity of the minute repeater demands nearly twice the number of components. Despite this, François-Paul Journe has managed to craft a movement with a height of just 4.50mm.

Technical Specifications_

Répétition Souveraine

Movement:

Calibre No.1408
Manually wound by 38 turns
Movement in 18 K rose Gold

Dimensions of the Movement:

Overall diameter : 32.20 mm
Casing-up diameter : 31.60 mm
Overall height: 4.50 mm
Height of winding system: 2.38 mm
Diameter of stem thread : S0.90

Balance:

Four inertia weights
Anachron flat balance spring
Free sprung
Mobile stud holders
Laser soldered balance spring stud
Pinned GE stud
Frequency: 21,600 v/h (3Hz)
Inertia: 10.10 mg/cm²
Angle of lift: 52°
Amplitude: 0h dial up/fully wound >320°
24h dial up > 280°

Principal characteristics:

Minute repeater strikes on demand
Time adjustment via crown in position 2
Repeater activated by single slide
Linear escapement with 15 tooth escape wheel
Two position crown
Two mainspring barrels in parallel

Indications in Blue:

Central hours and minutes
Sub-second at 7h30
Power reserve at 3h00
View to striking hammers

Power reserve:

56 hours + / -2 hours

Decoration:

Circular grained baseplate
Straight waves on bridges
3D engraving
Screw heads polished and bevelled
Pegs with polished rounded ends
Steel components hand polished and decorated

Dial:

Silver with guilloché Clous de Paris in the centre
Moiré finish in sub-seconds sub-dial and power-reserve sector
Satin finish chapter ring / Blued-steel hands

Smoked sapphire (upon request)
Numerals and time indications in ivory stamping
Blued-steel hands

Case:

Stainless Steel
Diameter: 40.00 mm
Height: 8.50 mm

Number of Pieces:

Movement without dial: 312
Cased- up on leather strap: 338
Jewels 33