



HARRY WINSTON

OPUS XIII: EXPECT THE UNEXPECTED

There are only a few different ways you can measure time in a mechanical watch, but when it comes to showing it, the field is wide open to inventiveness and originality. Harry Winston takes full advantage of this in Opus XIII to combine all the emotions that have made the Opus Series legendary: innovation, astonishment, awe.

Opus XIII once again defies the conventional rules of watchmaking. Fifty-nine pivoting minutes hands, eleven rotating triangles for the hours, and a sliding trapdoor perform a magic show where minutes and hours appear or vanish instantly — and, of course, tell the time.

Minutes accumulate around a track, each five minutes in red, withdrawing in unison when they complete the circle of the hour. Silver triangles spring in turn from a faceted dome to show the hours, rotating back when their duty's done. Every twelve hours, Harry Winston's logo is revealed on the dial, only to vanish sixty minutes later.

The fifty-nine minutes hands pivot on a ring of as many steel shafts, each held between two ruby bearings, bringing the number of jewels in the timepiece to 242. No other timepiece ever made has as many functional jewels. Each bearing has to be set and adjusted to the utmost precision — a test of the watchmaker's dexterity and patience. The ruby ball bearings for the sliding shutter are so tiny that the package had to be opened in a non-static environment lest they fly off.

Don't expect a massive timepiece, in fact the Opus XIII looks relatively discreet, even mysterious, its inner workings covered by a faceted dome. Beneath a smoked sapphire crystal you catch a glimpse of what looks like the fan of a jet engine. This is an extraordinary component, comprising fifty-nine jumper springs — one for each minutes hand — carved from a single piece of steel using LIGA technology (lithography, electroplating and molding). The blades had to be adjusted with a file in numerous prototypes until the component could be manufactured with the exactly right tension in each spring.



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HOW IT WORKS

Opus XIII has only one thing in common with any other watch and that is its balance and escapement; the rest of the mechanism is pure invention, the brainchild of independent watchmaker Ludovic Ballouard.

The display is produced by two separate power sources working as a team. One mainspring barrel drives the escapement through the going train and keeps the balance swinging at a steady 21'600 vibrations an hour. The other barrel provides the energy for the display of minutes, triggered every 60 seconds by the center wheel of the going train.

The key element is an outer minutes ring driven by the second barrel. Every minute, it jumps forward a step, released then locked by a rocking lever with two pallet stones, controlled by a cam working off the center wheel. A peg on the advancing ring flips each minutes hand forty degrees in turn, revealing them in succession around the dial. At the end of the 59th minute, a second outer ring comes into play, its crenelated rim simultaneously rotating the fifty-nine minutes hands back into their hiding places.

The mechanism for the hours is no less ingenious. Here again it relies on an outer ring that jumps forward every sixty minutes, turning the triangle of the old hour 180° so that it disappears beneath the faceted dome on the dial, and simultaneously turning up the next hour. At the heart of this mechanism is a snail cam that rotates once an hour. A lever drops off the edge of the cam, pulling a rack to turn a pinion that advances the hours ring. At the 12th hour, instead of turning up a triangular hour hand, the hours ring rotates a wheel attached to a connecting rod that pulls open a sliding shutter to reveal the Harry Winston logo in the center of the faceted dome.

Both mainspring barrels are wound by turning the crown back and forth. A rocking pinion engages the barrel for the going train when the crown is turned in one direction and shifts over to engage the other barrel when the crown is turned in the opposite direction. Similarly, when setting the time, the crown is pulled out and turned one way to advance the minutes and the other to advance the hours.

Opus XIII, which reinvents time, once again illustrates the creative explosion triggered between the Harry Winston team of designers and watchmakers and its partners in the Opus Series. Harry Winston believes nothing in watchmaking is beyond human ingenuity, and Opus XIII invariably proves it right.



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Technical Specifications

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| Name | Opus XIII |
| Reference | OPUMHM44WW001 |
| Movement Caliber | HW4101 |
| Type | Mechanical, manual-winding |
| Dimensions of movement | <ul style="list-style-type: none">· Diameter: 37.8 mm· Height: 4.95 mm |
| Number of components | Complete movement: 364 components |
| Number of jewels | 242 rubies |
| Power reserve | 35 hours |
| Barrels | 2 separate barrels armed by a rocking pinion |
| Balance wheel | Annular balance |
| Alt. / hour | 21'600 (3Hz) |
| Balance spring | Flat balance spring |
| Main plate | Circular-grained finish |
| Bridges | Circular-brushed finish |
| Functions | <ul style="list-style-type: none">· Hours display via eleven, 180-degree rotating hands (one hand rotating each hour except at 12h / 24h)· Minutes display with fifty-nine, 40-degree rotating hands· "HW" logo revealed at the center of the dial at noon and midnight |
| Case Material Finish | <ul style="list-style-type: none">· 18K white gold· Polished bezel and lugs, satin-brushed case band· "Harry Winston" engraved on the bezel at 12 o'clock, "Opus XIII" engraved on the bezel at 6 o'clock· Harry Winston triple arches at 12 o'clock and 6 o'clock |



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| Case dimensions | <ul style="list-style-type: none">· Diameter: 44.25 mm· Height: 13.6 mm |
| Crystal | Sapphire |
| Case back | Sapphire-crystal display back |
| Water resistance | 30 meters |
| Crown | <ul style="list-style-type: none">· 18K polished white gold crown at 2 o'clock· Embossed "HW" logo |
| Animation | <ul style="list-style-type: none">· Instantaneous hours and minutes· Cumulative display of minutes via a peripheral, jumping retrograde system with fifty-nine hands· Successive display of hours via a peripheral, jumping system with eleven hands· Sliding shutter revealing the "HW" logo every twelve hours |
| Dial | <ul style="list-style-type: none">· Faceted sapphire-crystal dome· Polished, rhodium-plated minute and five minute hands. Minute hands with black and white transfer. Five minute hands with black and red transfer· Polished, rhodium-plated, triangular shaped hour hands· Smoked sapphire-crystal over the minute hands· Beveled well with "HW" logo |
| Strap | Hand-sewn black alligator leather |
| Buckle | 18K white gold folding buckle |
| Limited Edition | 130 pieces |
| Collection | Opus Series |