

URWERK presents the UR-1001 Zeit Device Über Complication

Time-measuring instruments have marked significant epochs in history for millennia. Six thousand years ago, the shadows cast by obelisks in the Sumerian city of Ur revealed the passage of the sun; two thousand years ago, astronomers in ancient Greece used the Antikythera mechanism to calculate the positions of the sun, moon and planets in the heavens; and in the 18th century, John Harrison's H4 clock enabled safe and accurate navigation by sea.

URWERK now endows the 21st century with its own epoch-defining time – or Zeit in German – measuring instrument: The UR-1001 Zeit Device.





In our fast-paced lives we often describe time as 'fleeting' and our timepieces reflect this perception by measuring relatively short intervals i.e. seconds, minutes and hours. A few watches take a longer view and track days, months and years, some even leap years. But rarely do timepieces do justice to a universe measured in billions of years – as a true Zeit Device should.

The UR-1001 is a true Zeit Device: It is a grand über complication both measuring and quantifying the era in its entirety, from a solitary second to an astronomical millennia. Exuding force from a case seemingly carved from a block of solid metal, the UR-1001 marks the passage of time in seconds, minutes, hours, day/night, date, month, years, 100 years and all of the way to a monumental 1,000 years!

The Zeit Device houses a constellation of indications, including orbiting satellites and a comet-like flying retrograde. Dials, springs, satellites, carrousels, retrograde spiral spring were all manufactured in-house by URWERK, as were most of the components in the Zeit Device's complications and indications.

UR-1001 - Complications in Detail

Dial side

Hour Satellite Complication. The Hour Satellite Complication of the Zeit Device is a 'flying' design in that there is no top bridge supporting the carrousel. The mechanism requires a bottom support only, which allows maximum appreciation of the satellite hour and retrograde minute complications.

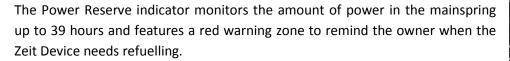




Retrograde Minute Hand. The Retrograde Minute Hand is fixed to a sprung ring around the circumference of the satellite complication. This ring is pushed along a guide rail by the hour satellite. A swan's neck spring on each arm of the carrousel engages two coaxial star-cams that slide along the guide rail carrying the minute hand. When the minute hand gets to the end of the rail at 60 minutes, the star-cams trip over to release the minute hand, which springs back to zero at the start of the scale where it rendezvous with the next satellite hour.

Day Night and Power Reserve Indicator.

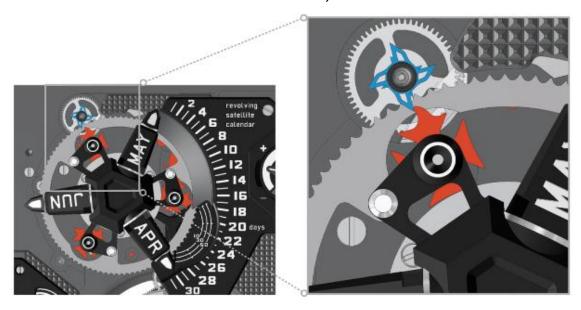
The Day/Night indicator is a rotating disc marked with Black Super-LumiNova for the night, white brushed-ruthenium for day and a striped mix for dusk/dawn. While useful in its own right, the Day/Night indicator comes into its own when setting the calendar mechanism.





Revolving Satellite Calendar. The Revolving Satellite Calendar is an original – both technically and graphically – calendar complication completely developed in-house by URWERK. Visually it is in the same family as the hour satellite complication, with months and date replacing hours and retrograde minutes. However, whereas the hours rotate across the minutes with unchanging 60-minute regularity, the month automatically adjusts the last date on the calendar complication according to whether it has 30 or 31 days.

Felix Baumgartner URWERK co-founder and chief watchmaker - reveals how the mechanism works: "At the end of 30 day months — April, June, September and November — the date advances automatically to the 1st of the following month. At the end of the short months, a finger on a Maltese cross intervenes to make the date wheel advance two days to the next month."





Back side



"Oil Change" indicator. The shortest time interval measured on the back is the 5-year "Oil Change" indicator at centre right, which alerts the user when a service is due after three years when the dial changes from white (years one to three) to red (years three to five). This is counter is reset to zero when the timepiece is serviced.

100-year indicator. The 100-year indicator advances in 5-year increments and acts like the odometer of a car. Where a car's odometer keeps track of the total distance number at vehicle has driven, the 100-year and 1000-year indicators of the UR-1001 register the total running time of the movement.

1000-year indicator. When the hand reaches the 100-year mark, the small pointer at the bottom of the 1000-year indicator on the left takes a small – small for the Zeit Device, but a giant leap for mankind – 100-year step upwards on its imperceptibly slow, but deliberate journey to a new millennium.

Case. The case of the UR-1001 is in AlTiN coated stainless steel. AlTiN – Aluminium Titanium Nitride – is an industrial surface treatment originally developed to reduce the wear of machine cutting tools. The very properties that make AlTiN suitable for industrial applications, e.g. increased oxidation resistance and hardness, coupled with its semi-matte black colour make it an ideal high-tech coating to protect the Zeit Device.

Martin Frei, URWERK co-founder and chief designer, explain: "To ensure the UR-1001 was both pleasing to hold and comfortable to wear, I carried a carved block of wood that I shaped and modified over months. The mock-up only took form in metal only when I was 100 per cent sure that the three-dimensional shape worked on both a tactile and visual level."



Fine finishing. The fine finishing and decoration throughout the case, dials and components of the Zeit Device are a harmonious blend of the contemporary and the traditional, echoing URWERK's ethos of 21st century watchmaking based on a solid foundation of the very best in traditional horology. Circular lines engraved into the top of the case give hint to the fact that the form of the Zeit Device's case is actually a circle with cut sides. Clous de Paris guilloche on the dial provides both a rich texture and a pleasing contrast with the flat surfaces on the indications. The satellites and their hands feature diamond-cut bevels that reflect light during the day, while flush embedded white Super-LumiNova ensures legible reading of the time at night. Clous de Paris guilloche surfaces continue on the back of the timepiece and in a tip of the hat to URWERK's home, Geneva waves (Côtes de Genève) are engraved on sections of the bridge supporting the base of the Hour Satellite Complication.

ARCAP. URWERK is one of a very few watch brands – perhaps the only – making extensive use of ARCAP is their timepieces. ARCAP alloys are a proprietary group of alloys that do not contain iron and so are non magnetic. They have very high tensile strength and they are resistant to oxidation – unlike the commonly used brass that has to be plated – chemical corrosion, low temperatures and are stable under temperature changes. And compared to brass, ARCAP is more stable when machined and does not retain tension, which makes it able to be machined to higher precision. ARCAP's advantages do not come free of charge and it wears machine tools out at a 5X higher rate than brass. In the UR-1001, the mainplate, baseplate, carrousels, satellites, dials, bridges, retrograde spiral spring and retrograde u-springs are all in ARCAP.

Winder/Display case. The combined automatic winder and display case of the Zeit Device is in polished, solid walnut with buffalo leather lining. The case can sit on a desk with the timepiece securely held (push-fit) in a vertical position with the dial side in full view. Every 10 or 15 minutes – the interval is adjustable according to whether the timepiece requires fast winding or maintaining winding – the Zeit Device is rotated 185° and slowly oscillates to rest, causing a winding rotor to charge the mainspring. Keeping the Zeit Device wound in this way minimises the necessity of having to reset the calendar functions after the movement has stopped.

UR-1001 Zeit Device - Raison d'être

"My journey to becoming a watchmaker began as a child in my father's atelier, which was filled with the antique clocks that he restored and collected. That was my favourite playground and I loved being among those huge wooden objects with their rotating wheels, ticking escapements and chiming music, so it was natural I became a watchmaker. It is now 15 years since my friend Martin Frei and I created URWERK, our own horological playground in which we have developed new – both technically and visually – methods of displaying time. Until today we have always been constrained by the size of the wristwatch. However, now, with the Zeit Device, we have allowed ourselves a carte blanche and created a larger playground for our imaginations . . . and then filled it with all of our complications and indications." Felix Baumgartner.



UR-1001 - Technical Specifications

Movement

Calibre: UR-10.01

Jewels: 51

Escapement: Swiss lever
Balance: Monometallic
Frequency: 28,800v/h, 4Hz

Balance spring: Flat

Power source: Single mainspring barrel

Power reserve: 39 hours

Winding system: Unidirectional winding rotor

Time mechanism: Double star retrograde with aluminium ring and platinum

counterweight

Calendar mechanism: 93 tooth wheel, 3 Maltese crosses

Retrograde minutes: Anti-shock safety device

Retrograde minute spring: Spiral of 6.5 turns, dimensions 174.4mm x 0.1mm x 0.3mm with

mobile piton (adjustable pin). Long length ensures flat torque curve

Plates and bridges: Baseplate in ARCAP
Screws: Titanium non-oxidising

Surface finishes: Circular-grained, Côtes de Genève and DLC treated mainplate and

baseplate, chamfered and polished screw heads

Indications

Dial side Revolving satellite hour complication

Retrograde minutes

Revolving satellite calendar with months and dates

Day/night indicator: black Super-LumiNova for night, white brushed-

ruthenium for day, mix for dusk/dawn

Power-reserve indicator 39 hours with red low-power zone

Running seconds: three-handed indication displaying 3 x 20 seconds

on a 120° dial

Côtes de Genève on Day/Night and Power Reserve indicator dials

Back side "Oil change" indicator (5 years)

Running-time indicator for 100 years

Linear running-time indicator for 1,000 years

Surface finishes: Sandblasted carousel

PE-CVD and DLC treated mainplate, baseplate, dials and satellite

complications

Satin-finished and diamond-polished satellites

Super-LumiNova treatment on markers



Setting and winding Three-position winding crown

Position 1 against case: winding

Position 2 one click: month and date

Position 3 two clicks: setting hours and minutes

Case

The AlTiN UR-1001 Zeit Device is a limited edition of 8 pieces in AlTiN treated steel with titanium elements.

Material: AlTiN steel with titanium elements

Chain: Hand-made, heat-blackened steel links featuring bespoke URWERK

clasp with carbineer closure

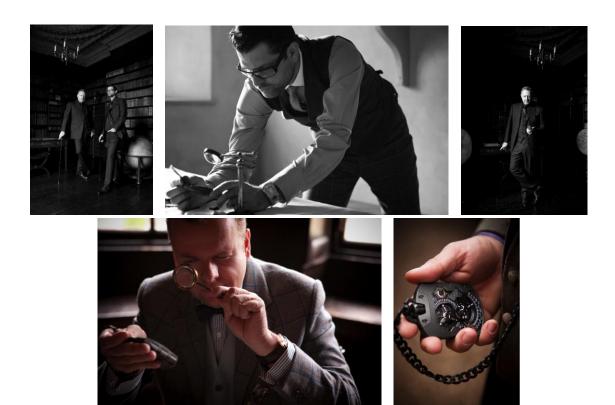
Dimensions: 106mm x 62mm x 23mm

Glasses: Sapphire crystal with anti-reflective coating

Water resistance: Pressure-tested to 3ATM

Surface finishes: Micro-sandblasted





Felix Baumgartner and Martin Frei, URWERK founders, visit renown British tailor Timothy Everest* to be fitted for a bespoke suit tailored especially for the UR-1001 Zeit Device.

(visuals in BESPOKE folder)

* Timothy Everest

Two decades ago, Timothy Everest had a hunch. "It was the early 90s, and everybody had gone through the whole "designer" and "brand" thing," he says. "I felt like I could introduce a new generation to the joys of handmade clothing – investment pieces that were built to last."

His hunch proved right. Twenty years later, Everest presides over a bespoke tailoring business with clients ranging from art dealers to accountants to rock stars, whom he encourages to dress as (in) appropriately as they wish. "There's no house style," he says. "We're about individuality, and expressing your personality through style, shape, and all the quirky little details that make each commission unique."

Everest's infectious enthusiasm for his art, and his magpie sensibility, has led to a broad and diverse range of creative collaborations over the years. He has created costumes for movies including Atonement, Mamma Mia, Eyes Wide Shut, and Mission Impossible. He has dressed celebrities for the Oscars, designed the British Olympic Team uniforms for the 2000 Olympics in Sydney, and styled Mick Jagger for his performance at the Grammy Awards in 2011.