



ARNOLD & SON

LONDON 1764

TBR

Combining marine precision with aesthetic perfection

With a timepiece that references to John Arnold and his son's watchmaking heritage, Arnold & Son unveils the TBR featuring the hand-finished A&S6008 calibre. Conceived, designed and manufactured in-house, this superbly engineered wristwatch heralds a new collection - the Instrument Collection that combines instrument precision with classical styling.

The TBR is the first timepiece in the new Instrument Collection from Arnold & Son and features the first automatic movement with an integrated true beat system to be developed, designed and manufactured entirely at the workshops in La Chaux-de-Fonds. Its pure, timeless design takes its inspiration from the later instrument-style chronometers produced by John Roger Arnold. These answered the call for timepieces rugged and reliable enough to withstand the hardships of life on the high seas combined with the down-to-the-second precision needed by marine navigators to determine longitude.

With the unmistakable design cues that define the family, the TBR is a masterpiece of reduced simplicity. The initials stand for the watch's two complications, true beat and retrograde. While the time is displayed in an off-centre subdial at 9 o'clock – a hallmark of the entire Instrument Collection – the two complications occupy the middle of the dial and command the front of the stage.

Dominating the face of the watch is the central true beat – or independent – seconds. The true beat seconds – a hark-back to the precision required by navigators on the high seas – is a rarely found complication these days, and its combination with an automatic winding system calls for enormous technical expertise. In the TBR it was made possible by a worldwide patented system comprising a sophisticated double wheel, an oscillating pinion and a pallet mechanism. This complex solution calls for virtually microscopic precision (to tolerances of a micron, or one thousandth of a millimetre) and the key parts are made using state-of-the-art LIGA fabrication technology. LIGA is a German acronym that stands for *Lithographie, Galvanoformung, Abformung* – lithography, electroplating and moulding – and describes the sequence of processes used to produce metal parts made of nickel and nickel phosphorus.

Longitude is measured in degrees, minutes and seconds. By comparing the time difference between local noon (when the sun reaches its zenith) and noon Greenwich Mean Time, a navigator is able to calculate the ship's longitude relative to the Greenwich Meridian (0°) to a precision of one second, and its position with a similar degree of accuracy.



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The “R” of TBR – retrograde – is a description of the watch’s second complication, the date display. The second most conspicuous element on the dial, the date display shows the dates 1 to 31 in Arabic numerals with intermediate dots for the even dates. A slim, undulating hand advances a day at a time until it reaches 31. At midnight on the 31st, the hand springs back (hence retrograde) smartly to 1, in other words to the first of the next month, and the process commences all over again.

The TBR’s retrograde mechanism is extremely sophisticated and features patented *dents sans jeu* (literally, teeth without play – or gaps), which ensure that the date hand advances cleanly and precisely. These components can only be produced using the complex LIGA fabrication technology described above. Also worth noting is the fact that the retrograde date can be set using the crown, which is considerably more demanding than having an additional pushpiece.

The TBR from Arnold & Son is available in either a 18-carat rose gold case or stainless steel case, measuring 44 millimeters in diameter, which is water-resistant to 30 meters, and with a hand-stitched brown or black alligator leather strap.





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Main technical characteristics:

Calibre: A&S6008

Exclusive Arnold & Son mechanical movement, self-winding, ceramic ball bearing, 34 jewels, diameter 30.4 mm, thickness 7.79 mm, power reserve 50 h, 28'800 vibrations/h, stop seconds

Functions: hours, minutes, true beat seconds, retrograde date



Movement decoration: 18-carat rose gold case model:
rhodium treated with *Haute Horlogerie* finishing: manually chamfered bridges with polished edges, fine circular graining and *Côtes de Genève rayonnantes*, brushed and skeletonised rotor, blued screws

Stainless steel case model:
NAC grey treated, with *Haute Horlogerie* finishing: manually chamfered bridges with polished edges, fine circular graining and *Côtes de Genève rayonnantes*, brushed and skeletonised rotor, mirror-polished screws



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| Dial colour: | silvery white and silvery opaline / light-grey and silvery opaline |
| Case: | 18-carat rose gold or stainless steel, diameter 44 mm, cambered sapphire with anti-reflective coating on both sides, case back see-through sapphire, water-resistant to 30 m |
| Strap: | Hand-stitched brown or black alligator leather |
| References: | 1ARAP.W01A.C120P 18-carat rose gold case 1ARAS.S01A.C121S Stainless steel case |

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