

Press release

**Patek Philippe Geneva
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**Patek Philippe Multi-Scale Chronograph Refs. 5975 and 4675
The chronograph: a measuring instrument par excellence**

Chronographs for measuring time intervals are among Patek Philippe's most popular timepieces. With eight regularly produced chronograph calibers, all of them developed and crafted entirely in-house, the manufacture's portfolio in this category is delightfully diversified as regards functionality and aesthetic appeal. A special model was created to commemorate the 175th anniversary; it has a few capabilities more than ordinary chronographs.

No type of watch reveals its purpose as a measuring instrument as obviously as the chronograph. If its function is combined with suitable scales, it can even transform itself into a mechanical computer for the wrist and will execute calculations based on time measurement. Accordingly, the commemorative model – the Multi-Scale Chronograph – is endowed with three logarithmic scales that can be used to compute speeds, distances, and heartbeats per minute. Until well into the 1960s, watches with tachymeters, telemeters, and pulsimeters were commonplace and widely used by professionals. This is what makes the limited-edition Patek Philippe Multi-Scale Chronograph for ladies and men such an attractive homage to the history of the manufacture and of time measurement.

The calculator for the wrist

For many physical units, time is a decisive factor. Speed defines the distance covered in a certain period of time. The speed of sound makes it possible to calculate distances, and a person's pulse is expressed as a number of heartbeats per minute. With appropriate scales on the dial, a chronograph can directly display such results without first requiring arithmetic conversions.

The secret behind such scales is their logarithmic graduation, a concept popularized by the classic slide rule. Logarithms simplify mathematical operations because multiplication and division are reduced to the more elementary arithmetic functions of addition and subtraction. Mathematicians in India discovered this relationship more than 2000 years ago, and in the 17th century, Swiss watchmaker Jost Bürgi (1552 – 1632) developed a new system for calculating logarithms. In 1622, he published the world's first logarithmic tables: they were used at all preparatory schools and by the most celebrated scientists until inexpensive pocket calculators became available.



When watches with one-second accuracy emerged, dialmakers harnessed the logarithmic graduation principle to create scales that would provide direct readings of speed, distance, or pulse rates based on the measurement of a time interval. This requires that every scale be calibrated to a specific unit of measurement.

Pulsimeter

Medical heart rate measurements are expressed as the number of pulses per minute. To accelerate such measurements without having to wait for an entire minute while counting, the Multi-Scale Chronograph has a pulsimeter scale calibrated to 15 heartbeats (GRADUE POUR 15 PULSATIONS). If the Multi-Scale Chronograph is started when the first pulse is felt and stopped on the fifteenth, the pulsimeter scale display the number of pulses per minute. During their daily rounds in the wards, physicians once typically had to take the pulse of over a hundred patients. A pulsimeter watch saved them more than an hour a day.

Tachymeter

The Multi-Scale Chronograph has a tachymeter scale calibrated to 1000 meters. On a highway, a car passenger would typically start the chronograph when passing a kilometer sign and stop it when passing the next one. The chronograph hand shows the elapsed time between the signs and, on the tachymeter scale, the average speed of the car during the measurement. So it doesn't actually measure distances: it measures the time needed to travel over a known distance.

Telemeter

The Multi-Scale Chronograph features a telemeter scale with kilometer graduations. Its principle is based on two known speeds as well as a visual and an acoustic signal. If a faraway event can be observed, it always takes some time before the respective noise is heard. The reason lies in the difference between the speed of light (about 300,000 km/s) and the speed of sound (about 333 m/s). Until the 1960s, even the military calculated distances according to this method. If it took five seconds for the observed muzzle flash to be followed by the thunder of the enemy's cannon, the telemeter scale showed how far away it was: $333/\text{second} \times 5 \text{ seconds} = 1675 \text{ meters}$.

Rate accuracy boosts measuring precision

The nature of the Multi-Scale Chronograph is identifiable not only by the dial, but also by the new version of the caliber CH 28-520 movement that was developed explicitly for this watch. It is a self-winding movement with a classic column wheel for controlling the start/stop functions and a nearly friction-free disk clutch that allows the sweep chronograph hand to be used as a permanently running seconds hand. The rate accuracy of the new movement is noteworthy. As specified by the Patek Philippe Seal, it will not vary by more than -3 to +2 seconds per day. The greater the accuracy of the movement, the higher the precision of the results displayed by the pulsimeter, tachymeter, and telemeter scales.

**Timeless beauty**

The visible personality of the commemorative Multi-Scale Chronograph models exemplifies the perfection of the Patek Philippe style that melds classic traditions with innovative elements. The case reflects sublime elegance emphasized by gracefully tiered lugs. They are invisibly screwed to the caseband and bezel, dependably securing these two case components. This complex but also very practical concept allows the case to be completely disassembled, which simplifies the finishing processes as well as service interventions. The dial features three concentric scales which define the functions of this chronograph. The men's models have the telemeter, pulsimeter, and tachymeter scales arranged from the outside to the inside. The order is reversed for the ladies' models. The Ref. 5975 for men will be presented in a limited edition of 400 watches each in 18K yellow, white, and rose gold as well as 100 versions in platinum. The ladies' versions with baguette diamond hour markers are limited to 150 watches each in white and rose gold. All Multi-Scale Chronographs are worn on hand-stitched alligator straps secured with fold-over clasps in gold to match the case, with the engraving "PATEK PHILIPPE 1839 – 2014".





Technical data

Multi-Scale Chronograph Ref. 5975 (men's model) limited to 400 watches each in yellow, white, and rose gold as well as 100 watches in platinum

Movement

Caliber 28-520
Self-winding mechanical movement, chronograph with column wheel and vertical clutch

Diameter: 30 mm
 Height: 5.2 mm
 Number of parts: 239
 Number of jewels: 29
 Power reserve: Min. 50 hours, max. 55 hours
 Centrifugal mass: Central rotor in 21K gold, unidirectional winding
 Balance: Gyromax[®]
 Frequency: 28,800 semi-oscillations per hour (4 Hz)
 Balance spring: Spiromax[®]
 Balance spring stud: Adjustable

Functions: 2-position crown:
 – Pushed in: To wind the watch
 – Pulled out: To set the time

Displays:

- Center hour and minute hands
- Sweep chronograph hand

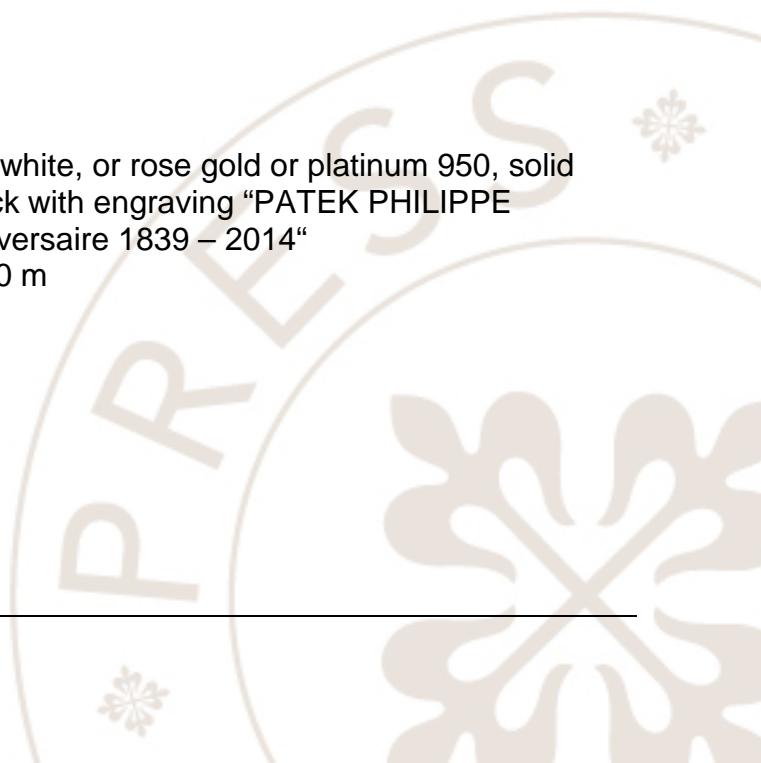
Pushers:

- At 2 o'clock: Chronograph start/stop
- At 4 o'clock: Chronograph reset

Hallmark: Patek Philippe Seal

Features

Case: Round, 18K yellow, white, or rose gold or platinum 950, solid gold or platinum back with engraving "PATEK PHILIPPE GENEVE 175^e Anniversaire 1839 – 2014"
 Water-resistant to 30 m





Case dimensions:	Diameter: 40 mm Length (across lugs): 46.7 mm Width (3 to 9 o'clock incl. crown): 42.3 mm Height (crystal to lugs): 10.8 mm Height (crystal to back): 10.25 mm Width between lugs: 20 mm
Dial:	Gold models: silvery gray with black printed scales Dauphine hour and minute hands in gold to match the case Chronograph hand blackened Pfinodal Obus hour markers in gold to match the case Platinum model: black with white printed scales Dauphine hour and minute hands in 18K white gold Chronograph hand rhodiumed Pfinodal Obus hour markers in 18K white gold
Strap:	Alligator with large square scales, hand-stitched, shiny black (platinum and white-gold models), shiny chocolate brown (yellow gold), and ultra-shiny chocolate brown (rose gold), fold-over clasp in 18K gold to match the case or in platinum, with engraving "PATEK PHILIPPE 1839 – 2014"





Technical data

Multi-Scale Chronograph Ref. 4675 (ladies' model) limited to 150 watches each in white or rose gold

Movement	Caliber 28-520 Self-winding mechanical movement, chronograph with column wheel and vertical clutch
Diameter:	30 mm
Height:	5.2 mm
Number of parts:	239
Number of jewels:	29
Power reserve:	Min. 50 hours, max. 55 hours
Centrifugal mass:	Central rotor in 21K gold, unidirectional winding
Balance:	Gyromax [®]
Frequency:	28,800 semi-oscillations per hour (4 Hz)
Balance spring:	Spiromax [®]
Balance spring stud:	Adjustable
Functions:	2-position crown: – Pushed in: To wind the watch – Pulled out: To set the time
Displays:	<ul style="list-style-type: none"> • Center hour and minute hands • Sweep chronograph hand
Pushers:	<ul style="list-style-type: none"> • At 2 o'clock: Chronograph start/stop • At 4 o'clock: Chronograph reset
Hallmark:	Patek Philippe Seal
Features	
Case:	Round, 18K white or rose gold, solid gold back with engraving “PATEK PHILIPPE GENEVE 175 ^e Anniversaire 1839 – 2014” Water-resistant to 30 m
Case dimensions:	Diameter: 37 mm Length (across lugs): 43.05 mm Width (3 to 9 o'clock incl. crown): 39.3 mm Height (crystal to lugs): 10.3 mm Height (crystal to back): 10.1 mm Width between lugs: 18 mm



Dial: Silvery gray with gray-brown printed scales
Dauphine hour and minute hands in gold to match the case
Chronograph hand Pfinodal
12 flawless baguette diamonds as hour markers

Strap: Alligator with large square scales, hand-stitched, shiny peacock blue (white-gold model) and purple (rose gold), fold-over clasp in 18K gold to match the case, with engraving "PATEK PHILIPPE 1839 – 2014"

