

Accuracy under adverse conditions

Trainmaster Kelvin

A new timepiece equipped with the mechanical thermometer unit patented by BALL

William Thomson, 1st Baron Kelvin, an Irish and British physicist and engineer born on 26th June, 1824 in Belfast, was a pioneer in developing the absolute thermodynamic temperature scale. In 1848 he proposed in his paper, On an Absolute Thermometric Scale, the need for a scale whereby "infinite cold" (absolute zero) was the scale's null point, and which used the degree Celsius for its unit increment. Lord Kelvin further calculated that absolute zero (the temperature at which all thermal motion ceases) was approximately equivalent to -273 °C. This absolute scale is known today as the Kelvin scale, and the kelvin (K) has since become a unit of measurement for temperature. Scientists nowadays have achieved temperatures extremely close to absolute zero, where matter exhibits quantum effects such as superconductivity and superfluidity.

Like Lord Kelvin in the scientific field, Webb C. Ball can also lay claim to the same pioneering role in the history of watchmaking, as he introduced the first chronometry standards used by the American railroad companies. The system developed by Webb C. Ball at the end of the 19th century was based on such stringent precision criteria that it was used by the Swiss Society of Chronometry (COSC) as the basis for its own certification system in 1973. These same values of precision and reliability shared by the measurement of time and temperature have inspired BALL Watch to create watches equipped with the patented mechanical thermometer unit.

This timepiece is included in the "Trainmaster" series with its models that naturally hark back to the first watches bearing the "BALL's Standard" marking and which ensured the safety of trains thanks to their unparalleled precision. The Trainmaster Kelvin has naturally been equipped with the BALL RR1601-C caliber including the TMT mechanical thermometer module. This function, developed and patented by BALL Watch, measures the outside temperature between -31°F and 113°F (-35°C and 45°C) with an accuracy of 97% that only a mechanical thermometer can achieve. The thermometer readings are given in increments of 18°F (5°C) in the half-moon shaped window at 6 o'clock on the dial.

BALL Watch produces its TMT module using bi-metallic materials of the highest quality. Bands are carefully wound, heat treated, cut according to very precise specifications, their ends folded and then laser welded. The plate and bridge are then custom-manufactured. BALL watchmakers place, decorate and then assemble the jewels and pins. The same procedure also applies to the patented screw adjustment system. This essential component ensures extremely high temperature measurement precision by stabilizing the position of the bi-metallic coil while still allowing it to expand or contract in response to the changing temperature.

Its case with a diameter of 39.5mm and a thickness of 11.8mm is made of stainless steel. The dial and hands are equipped with the luminescent technology developed by BALL Watch. Microtubes of H₃ gas, requiring no external source of light or energy and 100 times more effective than conventional luminescent paint, ensure perfect legibility in the dark. The sapphire crystal caseback bears the temperature conversion between the Kelvin and Celsius scales. The movement, visible through the caseback adds a meticulous touch of elegance to the watch. The Trainmaster Kelvin is available with a grey or silver dial, Celsius or Fahrenheit scale mounted on a crocodile leather strap with pin buckle.

Today, more than ever, BALL Watch is continuing its journey and asserting its role as a key protagonist in the exploration of modern time and the evolution of watchmaking history.



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Trainmaster Kelvin Automatic Series



Model Number: NT3888D-LLCJ-GYC | NT3888D-LLCJ-GYF

NT3888D-LLCJ-SLC | NT3888D-LLCJ-SLF

Movement: Automatic caliber BALL RR1601-C

Chronometer certified COSC

Functions: 14 micro gas tubes on hour, minute, second hands and dial for night reading capability

Patented mechanical thermometric indication (range: from -35°C to 45°C/-31°F to 113°F)

Shock resistant to 5,000Gs Anti-magnetic to 4,800A/m Water resistant to 30m/100ft

Hours, minutes, sweep seconds and date

Case: Stainless steel

Ø 39.5mm, height 11.8mm Anti-reflective sapphire crystal Sapphire crystal case back

Band: Crocodile leather strap with standard buckle
Dial: Grey or silver with Celsius or Fahrenheit scale

Fax: +41-32-724-5301