RM 63-02

WORLD TIMER

TECHNICAL SPECIFICATIONS OF RM 63-02 WORLD TIMER

CALIBER CRMA3: automatic winding movement with hours, minutes, oversize date and universal 24-hour time display.

Diameter: 47.00 x 13.85 mm.

MAIN FEATURES

POWER RESERVE
Circa 50 hours (±10%).

BASEPLATE AND BRIDGES IN GRADE 5 TITANIUM
Microblasted grade 5 titanium with electroplasma treatment improves the rigidity of the entire assembly and provides precise surface flatness, which is essential for the perfect functioning of the gear train.
The skeletonized baseplate and the bridges have been subjected to intensive and complete validation tests to optimize their resistance capacities.

MULTIPLE TIME ZONE ADJUSTMENT MECHANISM
The RM 63-02 features an innovative mechanism for adjusting the time zone. The rotating bezel includes a specific wheel connected to the movement that acts directly on the hour wheel. Turning the bezel ensures quicker, more accurate time-setting.

The lower disc, divided into 24 hours, shows the time in other cities and indicates whether it is day (white part) or night (blue part).

Operation: place the name of the desired city at 12 o'clock to automatically set the local time and see the time in the 23 others international cities marked on the 24-hour bezel.


RICHARD MILLE
RM 61-02
S. GEORGIA
LONDON
AZORES
ISTANBUL
PARIS
RIO
SAN JUAN
RIYADH
DUBAI
KARACHI
NEW YORK
MEXICO
DENVER
LOS ANGELES
ANCHORAGE
HAWAII
MIDWAY
NOUMEA
SYDNEY
AUCKLAND
TOKYO
HONG KONG
MANILA
HANOI
BANGKOK

OVERSIZE DATE DISPLAY

Semi-instantaneous, horizontally placed under 12 o'clock, functioning via two skeletonized calendar discs over a white background. The date can be corrected simply via the push-button located at 10 o'clock.

FUNCTION SELECTOR

A push-button located at 4 o'clock enables the selection of the winding, hand setting and neutral functions in a manner similar to a car's gearbox. An aperture located at 4 o'clock displays the function selected: W (Winding) - N (Neutral) - H (Hand setting).

BALANCE SPRING WITH VARIABLE INERTIA

It guarantees greater reliability when subjected to shock and also during movement assembly and disassembly, hence better chronometric results over time. The regulator index is eliminated and a more accurate and repeatable adjustment is possible thanks to 4 small adjustable weights placed directly on the balance.

FAST ROTATING BARREL (5 hours per revolution instead of 7.5 hours)

This type of barrel has the following advantages:

- The phenomenon of periodic internal mainspring adhesion is significantly diminished, thereby increasing performance,
- Provision of an excellent mainspring delta curve with an ideal power reserve/performance and regularity ratio.

GEAR TEETH PROFILE

The entire going train of the watch, the primary transmitter of power through the movement, utilizes a special profile for the teeth of the wheels. Developed specifically for the caliber CRMA3, the wheels use a 20° pressure angle. This system equalizes any discrepancies that might arise between the centers of each wheel, for instance during thermal changes and normal use, and promotes excellent torque transmission to the balance wheel, thus supporting excellent chronometric characteristics.

SPECIAL FLAT-HEAD MOVEMENT SCREWS

Richard Mille has utilized the best of modern micro-mechanical engineering in the use of special flat-head screws in the caliber CRMA3. These unusual screws with their 6 holed heads are based on the snake-eye screw concept principally used in the assembly of parts that require extremely precise torque to be applied.

SPLINE SCREWS IN GRADE 5 TITANIUM FOR THE MOVEMENT

These provide better control of the torque applied to the screws during assembly. These screws are therefore unaffected by physical manipulation during assembly or disassembly and age well.


SWISS MADE
63-02L
RICHARD MILLE
SWISS MADE
WATER RESISTANT 30M
RM63-02 Ti / 001
SWISS MADE
63-02L

OTHER FEATURES

- Diameter of the movement: 33.80 mm
- Thickness: 7.73 mm
- Number of jewels: 37
- Balance: CuBe, 4 arms, 4 setting screws, inertia moment 7.5 mg·cm^2, angle of lift 50º
- Frequency: 28,800 vph (4 Hz)
- Balance spring / Spiral: AK 3
- Shock protection: Incabloc 908.22.211.100 (transparent)
- Escapement wheel jewels: Rubifix (transparent)

CASE

Producing the RM 63-02 case is an extremely complex task, as almost 200 parts are required to create it. The design and creation of the watch are both fruits of an overall conceptual approach applied to the case, dial and individual movement parts. Its four-part construction includes the rotating bevel that, in addition to being used to adjust the watch, plays a role in keeping the timepiece water-resistant. The case mechanism is completed by horns and screws to securely fix the strap.

The case is made from grade 5 titanium and features exceptional hand finishes.
The bezel, the caseback and the crown protector are polished and satin-brushed. The case middle has vertical satin-brushing, while the lugs have vertical and horizontal satin-brushing and polished bevel edges.

The case is assembled with 12 spline screws in grade 5 titanium and is water-resistant to 30 metres, ensured by two Nitril O-ring seals.

CROWN

Made of grade 5 titanium, polished and microblasted, with O-ring seal and Alcryn® collar.

SPLINE SCREWS IN GRADE 5 TITANIUM FOR THE CASE

This enables better control of the torque applied to the screws during assembly. These screws are therefore unaffected by physical manipulation during assembly or disassembly and age well.

FLANGES

Upper and lower flanges in blue anodized aluminium.

DIAL

In sapphire (thickness: 0.40 mm) anti-glare treatment (both sides).

CRYSTAL

- Bezel side: in sapphire (1800 Vickers) with anti-glare treatment (both sides).
- Thickness: 1.10 mm at the center and 1.64 mm at outer edges
- Caseback: sapphire with anti-glare treatment (both sides)
- Thickness: 1.00 mm at the center and 1.74 mm at outer edges

FINISHING

MOVEMENT

- Upper bridge microblasted, chamfered and polished by hand
- Microblasted milled section
- Microblasted sinks
- Grey Electroplasma treatment for the baseplate and Titalyt® for the bridges

STEEL PARTS

- Satin-finished surfaces
- Hand polished chamfered edges
- Hand polished sinks
- Filed rims

PROFILE-TURNING

- Lapped and polished extremities
- Burnished pivots
- Polished post faces

WHEELS

- Diamond polished angles
- Circular finished faces
- Rhodium-plating (before cutting the teeth)